

The Wavy Hymn

Eternal Father, strong to save,
Whose arm hath bound the restless wave,
Who bidd'st the mighty ocean deep
Its own appointed limits keep,
O hear us when we cry to thee
For those in peril on the sea!

Lord, quard and guide the men who fly Through the great spaces in the sky.

Be with them always in the air,

In darkening storms or sunlight fair.

O hear us when we lift our prayer

For those in peril in the air!

Eternal Father, grant, we pray,

To all Marines, both night and day,

The courage, honor, strength, and skill

Their land to serve, thy law fulfill;

Be thou the shield forevermore

From every peril to the Corps.

Eternal father, Lord of hosts,

Watch o'er the men who guard our coasts.

Drotect them from the raging seas

And give them light and life and peace.

Grant them from thy great throne above

The shield and shelter of thy love. Amen.

Navy Birthday Oct.13,1983



Page 16



Page 34



Page 42



MAGAZINE OF THE U.S. NAVY

OCTOBER 1983 61st YEAR OF PUBLICATION-NUMBER 801

Chief of Naval Operations: ADM James D. Watkins
Chief of Information: COMO Jack A. Garrow
CO Navy Internal Relations Act: CAPT John A. Georg
Director NIRA Print Media Div: LCDR Keith Maynard

2 REACHING A NEW AWARENESS

Navy's continuing battle against fraud, waste, mismanagement

7 OUR PEOPLE ARE THE MOST IMPORTANT ASSET Interview with Rear Adm. David L. Harlow

10 CHIEF OF THE BOAT: CATALYST FOR THE CREW
A tradition dating back to the first submarines

16 RECRUITS UNDERGO WEIGHT TRAINING

Improvement shown in upper-body strength

18 JOURNEY TO KEY WEST

Change of home port for two hydrofoils

28 A LONG, LONELY CRUISE

Coast Guard's Polar Star in Antarctic waters

34 55 YEARS OF SILENCE

Now the secret beginnings of code breakers can be told

42 GUNSMITHS OF THE NAVY

A look at NavOrdSta Louisville

46 UP WITH PEOPLE

Concert presented aboard USS Belleau Wood (LHA 3)

Departments

24 Bearings

48 Mail Buoy/Reunions

Covers

Front: USS *Gemini* (PHM 6) is silhouetted against a San Diego sunset. Photo by PH1 Harold J. Gerwien, AVComPacFlt, San Diego.

Back: An adelie penguin, one of the "clowns of the Antarctic," casts an inquisitive but wary glance at the photographer, PA1 Ed Moreth, USCG.

Editor: John F. Coleman; Managing Editor: Joanne E. Dumene.

Associates: Richard Hosier (Layout), Michael Tuffli (Art).

Contributing Staff: CWO Merle Jacobsen, JOC(SW) Fred J. Klinkenberger Jr., JO1 Dale Hewey, JO1 J.D. Leipold, JO1 Gary Hopkins, Kenneth Rabben, Marge Holtz, JO2 William Berry, JO2 Russell Coons.

Research: Elaine McNeil, Candace Sams.

Production: LT DeAtley H. Cotton, DM2 Eugene Clark, PH2 Liz Schading, PH2 Perry Thorsvik, DM2 John D'Angelo, Karen L. Nelson.

All Hands is published from appropriated funds by authority of the Navy Internal Relations Activity in accordance with Navy Publications and Printing Regulation P-35. Second class postage paid at Philadelphia, Pa., and additional mailing offices. Articles, letters and address changes may be forwarded to the Editor, All Hands, Hoffman No. 2, 200 Stovall St., Alexandria, Va. 22332. Phone (202) 325-0495; Autovon 221-0495; Message: NAVINRELACT WASHINGTON DC

Fighting Fraud

Reaching a New Awareness

"The Navy will investigate any allegation of waste or wrongdoing, no matter who is involved because the Navy is responsible and accountable for the identification and elimination of such practices."

So says Commander John Redden, an assistant for investigations in the Office of the Naval Inspector General. Redden knows what he is talking about. He's directly involved in every DoD charge of fraud, waste or mismanagement directed to the Department of the Navy.

The Navy is taking effective action in many areas to combat fraud, waste and mismanagement, but the DoD Hotline Program is one of the newest and perhaps most visible elements of the campaign. The hotline openly invites participation by all levels, and it has met with significant results.

According to Redden, the personal 'gripe-type' calls have lessened considerably. "The number of hotline complaints for 1983 is down, but more of them —20 percent, in fact—have uncovered actual problems," he said. "This may well mean better screening of hotline complaints at lower levels and more successful attempts to resolve matters at command levels before the problems become bigger."

In 1982, the Department of Defense Hotline processed 6,620 hotline calls and letters. About two-thirds of them were small, personal gripes or were so ambiguous that follow-up was impossible. Some 2,200 had enough detail, however, to be tasked out for investigation. Of that number, the 665 Navy-related complaints (in-

cluding 498 dealing with management abuses and inefficiencies) were sent to the Investigations Division of the Naval Inspector General's office.

All 665 were investigated, all required completion reports, and some kind of action was taken in 8.3 percent of the complaints: financial recoupment, revision of management procedures or discipline against individuals. These included letters of reprimand and suspension for civilians and loss of pay and confinement to quarters for military. You may have read about some of them in the newspapers.

Redden admits that some of the results seem relatively insignificant, especially when it comes to recovering funds. "They may be only \$50 abuses," he said. "But they make a much bigger impact than is readily apparent. Many of the investigations themselves act as indicators; they sometimes ferret out much bigger problems."

As an example, Redden told of one hotline complaint charging a senior civil service employee with using a government computer for personal business. An investigation proved the allegation to be true. Even though the individual had used the computer during "free time" or when no backlog existed, the employee was given a letter of reprimand and was required to reimburse the government for the computer time used.

"Well, so what? It's just a little thing," you might say. The answer is that this one incident has to be considered in light of all the computers and word processors the Navy owns. What if everyone who has

access to one of these machines uses it just one hour a day for personal business? That would mean that government employees are away from their jobs thousands of hours each day for personal business, using government equipment. That translates into hundreds of thousands of dollars.

Also, with the knowledge that it is a punishable offense, other employees are less likely to use a computer for other than government business. The caveat here is especially to supervisors and managers who give specific permission or do not prevent misuse of government equipment. They are just as liable as the people who are actually using the equipment.

In the area of management abuses, or what is often perceived as mismanagement, an allegation might not be validated. However, the resulting investigation will often uncover a basic lack of communication in the command which can be corrected before it becomes a greater problem.

One phone call, for example, tipped off the Navy that an AIMD officer responsible for aircraft maintenance at an aircraft intermediate maintenance activity was renovating an office with metal purchased for aircraft repair. The material had been paid for with legitimate funds, except that the special fund was designated for aircraft repair only. Even though it was a misuse of material, there was no intention to defraud or to obtain personal gain. The action taken in this case was to issue a local instruction outlining proper procedures for use of specific funds.

Working Together for a Cause

The Navy's battle against fraud, waste and mismanagement is the responsibility of the Naval Inspector General Rear Admiral Henry C. Mustin. Admiral Mustin is convinced that the overwhelming majority of Navy men and women are highly supportive of the effort.

"We're talking about two basic things here-personal sense of ethics and accountability. As Admiral Watkins has said, 'When men lose confidence and trust in those who lead, order disintegrates into chaos and purposeful ships into uncontrollable derelicts.' There is a basic difference between civilian organizations and the Navy; failure by civilians may mean the ruin of a company or an industry, but failure by the Navy may mean the collapse of the nation. Therefore, we have a long tradition of high standards of ethics and accountability in the Navy-we are an honorable profession. We're honest, we're tough, and we clean up our own act when we have to."

Admiral Mustin supports the hotline concept. But he emphasizes that the DoD Hotline Program is not intended to be a means of circumventing the chain of command.



"The Navy's reliance on the chain of command has served the country well, in peace and war, for over 200 years. Most of our problems are solved by the chain of command long before they ever reach my level, and that is one of the great strengths of the Navy. The hotline is a necessary tool in those rare instances where the system, for whatever reason, has not functioned as intended.

"Fraud, waste and mismanagement have been front-page news recently, as an element of the president's program to rebuild the Navy while at the same time reducing government spending. The Inspector General Act of 1978 sets our overall course, and in the Navy we're following that course right down the line.

"The policy of the Secretary of the Navy is to encourage and require all hands to report all instances of fraud, waste and mismanagement that they observe. Such reports should be made through the chain of command because Navy managers have prime responsibility for corrective action. and so they should get the first opportunity to do so. The DoD Hotline Program is an alternative channel which in my view should be used predominantly when the chain of command has not been responsive. The confidentiality of individuals using it is assured by DoD policy and directive and is vested in public law. Like all other management tools, it is only as good as the user will let it be."

By itself, an instance of fraud, abuse or mismanagement might not be such a big thing. But it can be insidious, creeping to enormous proportions, overlapping into budget areas and translating into tax dollars which eventually come out of your pocket. Even with seemingly little things, the potential for great harm is there. That's why the Navy is putting such emphasis on eliminating fraud, waste and mismanagement.

So far, we've been talking about DoD hotline cases. There are other ways to report wrongdoing. First, and most important, is the chain of command. If you suspect wrongdoing, tell your supervisor. If you're not satisfied with the results, tell your supervisor that you will report it to

the next one in the chain. If the problem seems to be one of mismanagement, check out the procedure first in your personnel office, or ask your supervisor for an explanation. Sometimes what seems to be mismanagement is only a false perception based on a lack of knowledge.

This is not to say that management abuses and inefficiencies are not real or are not being uncovered. They are. But mismanagement by itself is relatively rare because it may be tied into waste and even fraudulent activity. For example, a hotline complaint alleged that one Navy officer allowed a civilian employee to work days of fewer than eight hours but signed the time card for full days. The allegation was proven; the time cards had been falsified.

The officer was given a letter of reprimand and confined to quarters. The civilian was suspended for 10 days without pay. What seemed to be only a case of management abuse was actually fraud.

One housing officer, a civilian, at a shore establishment was accused of improper conduct for filling out his time card in an unapproved manner. Although he had worked overtime earlier, he had accounted for the time off as though it had been a regular work day instead of signing out for leave or compensatory time. In this case, there was no fraudulent intent — it was merely poor judgment. He was given a letter of caution and a verbal reprimand.

In yet another case of mismanagement, a commanding officer was relieved for

OCTOBER 1983

Fighting Fraud

cause because he failed to take timely action against a person in a key position who was engaged in extensive fraudulent activity.

Whether your allegation is made by hotline or chain of command, it helps if you identify yourself. Anonymous calls and letters are accepted, but they are not as effective. They sometimes go unresolved because there's no way of obtaining additional information if clarification is needed. If you so desire, your name will not be released to anyone; your right to confidentiality will be respected, and the

Do Your Part

The Navy is cracking down on fraud, waste and abuse. No lead is too small or insignificant to investigate. The Navy wants you to help by reporting what you think are instances of fraud, waste or abuse. It would help if you can come up with proof, but the Navy will investigate all allegations.

First, use your chain of command. If this effort fails, use the hotline.

When you use the DoD hotline, call: 800-424-9098 toll free 693-5080 Washington area 223-5080 Autovon or you can write: DoD Hotline The Pentagon Washington, D.C. 20301

- Make sure you have a valid complaint.
 There are other, more proper channels if you have a personal grievance or an EEO complaint.
 - · Be specific with dates, places, names.
- Identify yourself; ask for confidentiality if you so desire.

As *All Hands* went to press, the Navy announced an alternative method for reporting fraud, waste or abuse. It is a central Navy hotline service, and reporting can be accomplished either by mail or telephone.

800-522-3451 toll free 433-6743 Washington area 288-6743 Autovon

or write:

Office of the Naval Inspector General Attn: Navy Hotline, Bldg. 200 Washington Navy Yard Washington, D.C. 20374 Navy will go to great lengths to protect your identity. If you are willing to reveal your name for purposes of an investigation, the Navy guarantees protection against reprisal.

In one case, someone at a shore establishment reported that employees were regularly spending excessive time away from work, especially during lunch time. The inspector general's office forwarded the report to the ISIC of the naval activity for further investigation. Because more information was needed, the investigating officer requested the name of the informant. The inspector general's office refused, but separately contacted the complainant to see if more detailed information was available. Anything that might have led to the complainant's identity was removed from the file. To this day, only the Navy IG representative knows the identity of the person who made the complaint.

As it turned out, Navy auditors, after checking each date and the time records of the people involved, determined that all had either been on official business or had signed out for leave. Even so, the name of the person who made the allegation was never revealed; the IG was satisfied that a complete inquiry had been conducted.

Other ways to provide information which might lead to proof of fraud, waste or mismanagement are through IG inspections, audit follow-ups, cost-savings identification and beneficial suggestions. Also, there's nothing to prevent a person who suspects criminal misconduct from going directly to the Naval Investigative Service.

The point is that we have a duty to report wrongdoing, no matter how minor, in the places where we work. It is for the good of the individual, it is for the good of the whole, and as Redden said, "Catching one criminal is worth it, correcting one significant mismanagement problem is worth it."

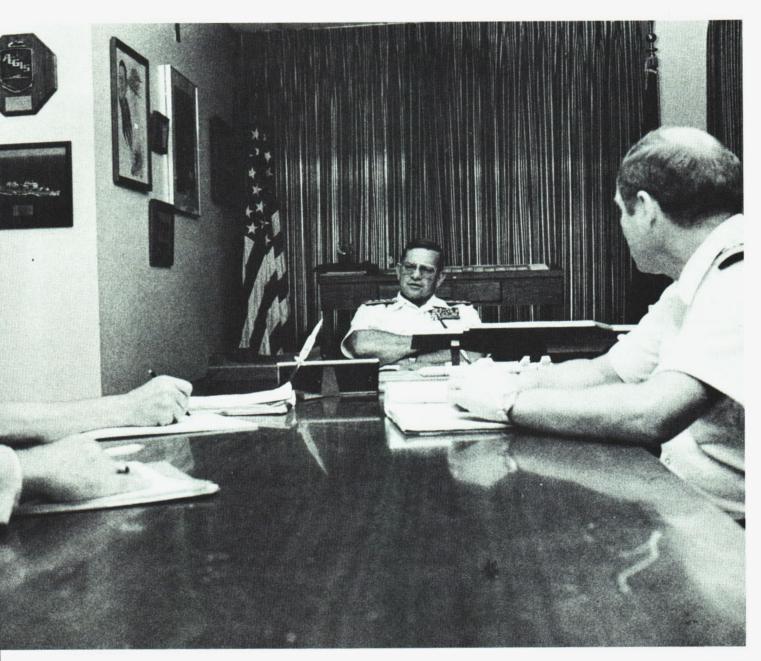
Redden related that when he came into the program, he was really disappointed about his assignment to the IG's Investigations Division. "I'm an aviator—what did I know about fraud, waste or mismanagement?" He soon changed his mind, coming to the conclusion that misman-



Every case that comes to the IG's Investigations Division becomes the subject of intense study (l-r): Roy Elmquist, Capt. Paul Carroll, Navy IG Rear Adm. Henry C. Mustin, Cmdr. John Redden.

agement is a serious problem. "And I'm proud to say the Navy is doing something about it," he said. "Money is being recovered, managers are changing their methods, and a whole new awareness is growing."

The other three people in OP 81 (located in Building 6 on the grounds of the old Bureau of Medicine at 23rd & Constitution Ave., N.W., Washington, D.C.) agree: Captain Paul Carroll, a Navy lawyer who is division director; Roy Elmquist, an NIS agent with an extensive criminal investi-



gations background; and John Poore, on assignment from the Naval Audit Service.

These four have a corner on the hotline calls directed to the Navy. They analyze every complaint and decide how an investigation should proceed. Usually, the complaint goes to the echelon two command with a copy to the third echelon command unless it is the third echelon that is directly charged. Sometimes, a local command is directed to conduct the investigation.

Or, the Naval Investigative Service will go to work on the case. These same four people also deal with congressional inquiries and private citizen complaints, all of which are analyzed.

Some of the direct calls to the IG investigations office are of a pestering nature. But none are discounted if a potential problem is revealed. One call, which at first seemed like a minor complaint, resulted in an investigation that proved extensive falsification of an SF 171, the standard civilian job application form.

Even though the investigations don't always prove fraud, waste or mismanagement, Carroll agrees that the program is worthwhile.

"It's working. We can see the results. Despite what the newspapers sometimes

Examples of Criminal Activities Investigated by NIS

- Theft of government property.
- Embezzlement of government funds.
- · An offer to bribe.
- · Making a false official statement.
- · Submitting false travel claims.
- Accepting kickbacks from contractors.
- · Accepting gratuities.
- · Misuse of public funds.
- Fraudulent/illegal contracting procedures for personal gain.
- Misuse of government equipment or materials.

OCTOBER 1983 5

Fighting Fraud

print, the Navy is doing a good job in uncovering abuses. Too often, statements are taken out of context and are blown out of proportion.

"Navy management is uncovering wrongdoing and correcting it, but the Navy doesn't get full credit. In many cases, we initiate the action and we catch the offenders, and then we're criticized for the offense. What isn't fully recognized is the total effort by commands to solve the problems."

Carroll pointed out that in the last fiscal year, Navy command internal review organizations completed more than 11,400 reviews with potential monetary benefits totaling nearly \$9.2 million. Navy military exchange audits resulted in nearly \$1.4 million in monetary benefits, largely in future cost avoidance. Naval Investigative Service at command request completed 3,764 fraud and 9,486 larceny investigations, which resulted in actual or potential savings to the government of nearly \$8.1 million. Management implementation of Naval Audit Service recommendations has also brought positive results. For fiscal year 1982, the Naval Inspector General validated \$4.1 million in NavAudSvc collections/savings and \$12.4 million in cost avoidance.

Also, there are day-to-day contract management efforts by the Chief of Naval Material. One recent example is the contract negotiations with Pratt and Whitney for F-14, A-6E and EA-6B aircraft engines. As a result of management's efforts, there was a 6-percent average drop in engine prices over those obtained in the previous year. Extended warranty periods for the F-14 engine were also included at no extra cost to Navy.

Carroll emphasized that the hotline program provides an alternate channel for people to express their view of problems within the Navy. "This may not be a bad thing," he said. "We're showing that complaints will be investigated. And even though we don't always find evidence of wrongdoing or waste, it builds confidence in the system. It shows we care what people think."

The hotline program has revealed another old problem: the tremendous negative impact of the careless statement. Poor communication and careless speaking lead to misunderstandings. Better communication can often prevent problems. An example is the investigation that resulted from a pilot seeking permission to land and park his Navy airplane at a joint use (military and civilian) airfield for a weekend. The purpose of the visit was stated as "to visit my parents." The flight to and from that particular field was a cross-country training flight properly authorized and sched-

uled for legitimate training purposes. If properly stated, no eyebrows would have been raised, no hotline calls would have been made, and no embarrassment to the command or individual would have occurred.

The remark, however, was reported as "evidence" of gross waste and misuse of government funds, and an investigation was initiated. This points up that many people don't understand the underlying reasons for many actions, and the newspapers, in reporting a "story," don't give an explanation either. This can lead to a general misunderstanding on the part of the public.

Therefore, what a person sometimes says and how it is said can be misinterpreted. So, in addition to the responsibility we all have for reporting instances of fraud, waste or mismanagement, we all have a responsibility to present information in the proper context.

More than that, all of us, military and civilians, need to ask ourselves, as Chief of Naval Operations Admiral James D. Watkins said, "Have we really measured ourselves as just stewards of public funds?"

If not, we need to do something about it

—JED

—Photos by JO2 Russell Coons

Examples of Results

Since March 1980, Naval Shipyard Charleston, S.C., has identified nearly \$1.4 million saved as a result of an active program to combat fraud, waste and mismanagement. Major areas of savings include a \$275,000 reduction in ServMart purchases as a result of improved internal controls and approximately \$70,000 recoupment from travel. One hundred thousand dollars was saved through improved General Services Administration motor vehicle and GSA contract rental vehicle use practices, and recovery of \$94,000 in new or mandatory repairable items improperly disposed of since March 1982.

The program to eliminate fraud, waste and mismanagement at the Naval Ord-

nance Station, Indian Head, Md., was established early in 1981. The main emphasis was on auditing travel claims at that time. Later, the station established an analysis and control group and hired a permanent criminal investigator to develop and implement a dynamic program to combat fraud, waste and mismanagement. Today, the analysis and control group handles the employee awareness program, develops instructions and procedures to prevent fraud, waste and mismanagement, and investigates or assigns responsibility for investigating station hotline calls. The group soon will be able to analyze data using a minicomputer to detect instances of fraud, waste and mismanagement.

The hotline at the Naval Ordnance Station receives an average of 110 calls per year. Approximately 62 percent are valid instances of improprieties or wasteful practices.

One of the features of the program at Indian Head is employee awareness with a continuing slogan contest carrying a cash award for the best monthly slogan. Instances of fraud, waste and mismanagement are publicized as a deterrent to continuing such illegal practices.

In 1982, the Naval Ordnance Station, Indian Head, Md., saved more than \$100,000 as a result of its aggressive campaign against fraud, waste and mismanagement.

'Our People are the Most Important Asset'

Interview with Rear Adm. David L. Harlow

From the offices in the Navy Annex in Arlington, Va., the careers of Navy men and women throughout the world are guided and developed. The command responsible for this guidance, as well as all other personnel programs, is the Naval Military Personnel Command. A monumental task in itself, the command's job has become even more difficult because of budget constraints this fiscal year.

Personnel and budget planners were hard pressed when retention went even higher than predicted, when fewer people than anticipated requested retirement, transfer to the Fleet Reserve, and release from active duty, and when recruiting numbers swelled to near their year-end goals by midfiscal year. The result is a force that is more senior, more experienced and more costly as well. Added to these internal factors were additional personnel budget constraints levied by Congress.

The dilemma for the Navy was how to cut personnel costs without doing serious damage to much-needed retention improvements seen in the Navy over the last three years. To stretch the military personnel budget so it would meet all the



expenses generated during the year, advancements and promotions had to be adjusted, general detail sailors in the Navy were reduced, and voluntary extensions at current duty stations were requested. At the helm of NMPC during all this activity was Rear Admiral David L. Harlow. He

and his staff have borne the brunt of sailors' questions and frustrations growing out of the financially lean year.

Advancements and Extensions

An element of stability is returning to Navy personnel management, although congressional decisions on the FY 84 budget will certainly have an effect. However, Admiral Harlow foresees no additional advancement slowdowns or mandatory tour extensions ahead.

"Advancement slowdowns and tour extensions are not going to become the norm. They were a necessary adjustment for the '83 budget problems," said the admiral. "We're getting better at managing our personnel budget and predicting personnel trends.

"If you think about it, we have been executing an account that was prepared back in 1980. That was a time when the planners were hoping for improved retention but not programming for the impressive rates we have realized. They counted on the Navy's growth from accessions—less expensive people. Looking over our shoulder at the '83 problems, we see that

OCTOBER 1983 7

next year will again be tight, but not nearly as difficult as what we have just been through."

600-ship Navy

Nevertheless, personnel and fiscal plans for the future continue to require improved forecasting as the Navy expands to 600 ships. Even with letter-perfect predictions about how many people will retire or resign and how many will stay for 30-year careers, this expansion of the force makes the job of long-range planning more difficult. The hard part is coming up with a model that will determine the right mix of people—determining how many recruits the Navy needs today to have the right number of senior petty officers in the future.

As the 1990s approach, the Navy's rebuilding and modernization program continues to move toward its goals. Sailors to man the new wave of ships are being recruited today, and the admiral sees a Navy that is growing at the right speed in the right places.

"Our ability to man these new ships is based on retention as well as recruitment. We have programmed ourselves toward that goal, and I am confident we'll be there when all these ships come on line.

"One of the toughest problems we faced was matching the numbers of skilled petty officers on board to requirements. However, retention has significantly improved that. Right now, if we look at a few specific critical technical ratings, the picture is still not good. But that's not the situation across the board. And that's where we'll focus our attention to ensure that we have those critical technical ratings manned at all paygrades," the admiral said.

"If we maintain pay comparability and keep our special pays, like sea duty pay, and if we stay on track with our qualityof-life programs, we'll have the necessary skilled petty officers for our changing and technologically complex Navy."

100-percent Manning

Right now, the Navy is in fairly good shape in the area of personnel manning. Even with recent manning improvements, many sailors wonder why their ships aren't manned at 100 percent. Where is that

missing seaman, that first class petty officer?

Although many ships today are not manned to full-billet capacity, none are at a level where they cannot meet operational requirements. In fact, today's manning levels in the fleet are in the mid- to high-90-percent range.

"We have to keep in mind that we're a peacetime Navy. Although manning the fleet is our top priority, we must balance fleet manning with support manning. We're keeping our ships manned near the 95-percent level. That isn't perfect, and we're always working to improve it. Realistically, we won't see 100-percent manning at sea or ashore with a peacetime Navy. We're very proud of the fact that we've been able to get all our ships up to a level where they can meet operational requirements. That's a very different picture from the one we saw a few years ago when we had ships that couldn't get under way because of a shortage of people."

Detailing

Keeping manning at adequate levels is one part of the detailing equation, and career development is the other. The growth of the Navy's high-tech professionals is the primary responsibility of a core of veteran-sailors called detailers. They are men and women who act as personal representatives for the Navy and the individual, helping to mold sailors' careers through the right variety of assignments. These detailers are at the forefront in executing Navy personnel policy that directly affects a sailor's career.

"Detailers listen to complaints and tell sailors what is going on in the Navy concerning distribution issues," said Admiral Harlow. "In doing so, they have a tremendous effect on morale."

The impact for most people is positive. But all too often, only one side of stories dealing with the complex detailing process is heard when a sailor does not get an assignment he wants. Many of these are "sea stories" of a sort that have tarnished NMPC's image unfairly.

"The detailers are sailors with shipboard experience and solid service reputations," said Admiral Harlow. "We have tremendous quality here. We have to! Their decisions affect Navy readiness, the future of every sailor and the lives of their families.

"The detailing philosophy is that we have to meet the needs of the Navy. We have what we call the triad of detailing—the needs of the service, the desires of the individual and the needs of the individual for career growth. To that combination, I've added compassion. I have explained



to all the detailers that I expect them to deal with individuals compassionately. People with special problems or needs should let us know about them *before* we issue a set of orders.

"The important thing here is communication with your detailer," the admiral added. "We can't take special needs into account if we don't know about them. And those sailors who feel they are not being understood or dealt with fairly should use the chain of command with a final alternative being a request for a flag review of their cases. We are not so rigid in our practices that we can't flex when the need arises."

Admiral Harlow added, "The detailers are here to help sailors get a broad range of career experiences in order to become more competitive for advancement, especially at the chief petty officer level. A detailer's job is a tough one, but we have the best the Navy has to offer."

Quality of Life

While most people associate orders and promotions with NMPC, they don't think of this command when they check into unaccompanied housing, use of child-care

NMPC is located at the Navy Annex in Arlington, Va., less than a mile from the Pentagon. Photo by JO2 William Berry.



THIS IS THE JOB:

CLASP • BOOST • STAR • CREO • SRB • NAVAL HOME • SHIFT COL-ORS • RETIRED GUIDE FOR NAVAL PERSONNEL AND THEIR FAM-ILIES • PERSPECTIVE • UNIFORM BOARD • RAPIDS • SDS • NODAC • OVERSEAS TRANSFER INFORMATION SERVICE • PER-SONNEL STATISTICS • NAVY PASSENGER TRANSPORTATION • IN-SERVICE PROCUREMENT • "A" SCHOOL CONTROL • PER-SONAL AFFAIRS • FAMILY PROGRAMS • SUBSTANCE ABUSE • MPN ACCOUNT • NAVAL RESERVE PERSONNEL MANAGE-MENT • NAVAL RESERVE PROMOTIONS • MOTION PICTURE SERVICES • NAVY BAND • ALCOHOL REHAB CENTERS • DRUG REHAB CENTERS • NAVY SPECIAL SERVICES • NAVY MUSIC PRO-GRAM • PHYSICAL FITNESS/WEIGHT CONTROL • PERSONNEL SECURITY CLEARANCE • PERSONNEL PLANNING • RETEN-TION • DETAILING • PROMOTIONS • ADVANCEMENTS • ENLISTED EVALUATIONS • OFFICER FITNESS REPORTS • FLEET MANNING • UEPHS • UOPHS • CHILD-CARE CENTERS • HOBBY SHOPS • CLUBS AND MESSES • DEPENDENT SCHOLARSHIPS • RECREATIONAL FACILITIES • BASE THEATERS • ON-BASE CLASSES • FAMILY SERVICE CENTERS • VOTING ASSISTANCE • DRUG AND ALCOHOL ABUSE, PREVENTION AND REHABILITA-TION • LMET • CASUALTY ASSISTANCE • HUMAN RESOURCE MANAGEMENT • HEALTH AND PHYSICAL READINESS • CAREER DEVELOPMENT • RETIREMENT • SERVICE RECORDS • BRIGS • CCUS • OUALITY OF LIFE • WELFARE AND RECREATION • PASS SYSTEM • SEPARATION • AUGMENTATION • RESIGNATION • INTER-SERVICE TRANSFERS • RECALL • TEMAC • HUMANI-TARIAN REASSIGNMENT • DISCHARGES • EXTENSIONS • RE-EN-LISTMENTS • LINK • SELECTION BOARDS • COMMAND SCREEN BOARD • SEA/SHORE ROTATION • PCS • NEC • NOBS • NAVET • PRIDE.

facility, visit the auto hobby shop or base gym, stop off for lunch at the club, take an aerobics class or help their child apply for a dependent scholarship. These programs and more are also part of NMPC's mission, and Admiral Harlow is justifiably proud of the outstanding results achieved in these areas.

"We manage an overwhelming number of programs here that are designed to enhance the quality of life in the Navy. Most people don't know that we're connected to these programs," the admiral said.

"Morale, welfare and recreation activities, including clubs and messes, recreation facilities, hobby shops, theaters, onbase classes and many more are all funded and managed by NMPC. We also have programs designed especially for Navy people and their families—dependent scholarships, child care, family service

centers, the Overseas Transfer Information Service to give people information on upcoming overseas assignments, and benefit entitlements for families of deceased members. These are all part of our qualityof-life emphasis," Admiral Harlow added.

NMPC is also responsible for managing a host of other "people" programs, such as voting assistance, drug and alcohol rehabilitation, LMET, housing for unaccompanied enlisted personnel, casualty assistance, human resources management, and health and physical readiness.

"Our job," concluded Admiral Harlow, "is to implement all of CNO's policies for all Navy people. He recognizes, as do we, that our people are the most important asset in the entire Navy. Without this emphasis from the highest levels of Navy leadership, there would be no need for this command to exist."

Chief of the Boat:

It may mean "close of business" in the government, but in the submarine service COB stands for chief of the boat.

COBs have been around as long as the submarine service. Chief Gunner's Mate W.H. Reader was the Navy's first chief of the boat, according to a 1946 article in the Sub Base Gazette, then the newspaper of the Submarine Base New London, Conn. "He served on board USS Holland (SS 1) back in 1900 with the first U.S. submarine commanding officer, Lieutenant H.H. Caldwell. Back in the early days of submarines, the chief of the boat was the executive officer, in fact, if not in name, for the commanding officer was the only commissioned officer on board."

In a 1953 issue of the U.S. Naval Institute's *Proceedings* magazine, Reader recalled the silent service's beginning. "The original crew (of *Holland*) consisted of five men and one officer as captain; later an executive officer was added."

Traditionally, COBs often came from the torpedoman's mate rating. Theodore Roscoe wrote in *United States Submarine Operations in World War II*: "The senior chief petty officer on board, usually a chief torpedoman's mate, is designated the 'Chief of the Boat.'" That is largely true today—five of 10 COBs and former COBs interviewed in Groton this past spring were torpedoman's mates.

Master Chief Torpedoman's Mate (SS) Robert A. Cochran served aboard seven submarines—three of them as COB. "After the first tour, I got an idea of what the job was all about and it became easier from there," he said. Cochran was COB of USS *Tautog* (SSN 639) before his present job as administrative assistant for the submarine school's advanced training department.

A 29-year veteran, Cochran explained why so many COBs are torpedomen. "Originally," he said, "COBs were responsible principally for weapons handling, seamanship and topside appearance. Those things were traditionally

associated with the TM rating."

Fewer COBs today are torpedomen because more nuclear-trained people are filling the position, he said. Of the dozen ratings commonly found in a submarine's CPO quarters, Cochran added, only one—hospital corpsman—is ineligible to become COB. A corpsman, he said, must administratively change his rating to become chief of the boat.

"The CPO quarters in a typical attack submarine has two machinist's mates and two electronics technicians," he said, plus one chief in each of the following ratings: electrician's mate, radioman, yeoman, fire control technician, quartermaster, torpedoman's mate, hospital corpsman, mess management specialist and storekeeper. A fleet ballistic missile submarine, Cochran added, would have a chief missile technician in addition to the other ratings.

The "Atlantic Fleet Standard Submarine Organizational Manual," under a section outlining duties, responsibilities and authority, lists 20 specific items for COBs. For example, a COB is charged with helping to keep "the command aware of existing or potential situations, procedures and practices which could affect the welfare, morale, job satisfaction and utilization of enlisted personnel."

Cochran continued, "At sea the COB stands diving officer of the watch... also the battle stations diving officer of the watch... usually because he's the most experienced and the best at the job."

He added that being a chief of the boat is career enhancing.

Having sat on the most recent E-8/E-9 selection board, Cochran said the records of COBs were clearly superior to those of non-COBs in the same paygrade and rating.

Most COBs today are master chiefs, because higher submarine and sea pay make duty at sea more attractive and because more people are staying in the Navy past 20 years.

One former COB, who no longer draws

submarine or sea pay, has served almost long enough to retire twice—and still isn't ready to hang up his multihash marked uniform.

Master Chief Electronics Technician (SS) Ray R. Kuhn regrets he can't return to sea and be a COB again because of a hearing loss. "For my money, that's the best job in the Navy for an enlisted man."



Catalyst for the Crew

Kuhn, now 66, joined the Navy in 1944. He served aboard seven submarines—four of them as COB—since getting into the silent service in 1947. He now serves as mentor to many COBs and other chief petty officers in Groton.

Listing a COB's responsibilities, Kuhn said, "He's the guy that's in the middle of everything. The COB advises the com-

manding officer on enlisted problems. He's the guy that divies up the work and sees that it gets done.

"He supports the captain in morale matters. He handles visitors riding the boat. He trains the topside gang when the boat is surfaced. . . ."

When Kuhn became a master chief petty officer in 1968, one of today's COBs was

barely beginning his naval career.

At 34, Master Chief Electronics Technician (SS) Patrick D. James, of USS *Philadelphia* (SSN 690), is among the younger COBs.

James, with 15 years in the Navy, spent a third of that time aboard *Philadelphia*—the last two years as COB. Before becoming COB, he was in charge of his boat's electronics technicians and data systems technicians.

Among his responsibilities as COB, James lists "information seeking" for *Philadelphia* at shore activities. Responsibilities to his enlisted shipmates also include coordinating all types of training, organizing them and maintaining their professionalism and morale. He keeps them informed of uniform changes, arranges billeting ashore and aboard, maintains their watch bill and ensures plans of the day and week are published.

To be a COB, James said, "You've got to like working with people."

James said the COB selection process starts with the CO's recommendation, which goes to the Naval Military Personnel Command via the squadron commander. Nominees are interviewed by COBs, the squadron command master chief and a senior officer.

He said his relationship with his fellow chiefs didn't change when he became COB and that the job rotates among them during his absence. Summing up, James said, "It's definitely a challenge. You're not locked into a set, day-to-day routine."

According to Master Chief Torpedoman's Mate (SS) D.H. Padgett, blue crew



GMC W.H. Reader, bottom left, was the submarine service's first COB. MMC B. Borvic is at right. Middle row (l-r): GM2 C. Gunther, Lt. H.H. Caldwell, CO of USS Holland (SS I) and GM2 A. Callahan. Back row (l-r): GM1 H. Wayhap, GM1 O. Swanson, Gunner (CWO) O. Hill and EM2 W. Hall. Hill, Hall and Gunther were under instruction and weren't Holland crew members.

Chief of the Boat

COB of USS *Florida* (SSBN 728), "tough skin" is an essential quality for a COB. "You have to be willing to get out of your rating and into the people business," he added.

A former COB, Master Chief Torpedoman's Mate (SS) J.E. Chappell, said, "You need to have broad shoulders. You can't be afraid to take things on."

Chappell, assistant security officer at Groton, added, "You've got to be able to turn your collar around. A little religion doesn't hurt."

Master Chief Machinist's Mate (SS) Mike Dobrolet, COB of USS Whale (SSN 638), said, "You've got to be a good listener, to listen to what everyone has to say. Your main job is to take care of your people."

The toughest part of the job, he said, is keeping a perspective on the seriousness of problems, because "A sailor's problem may seem insignificant to the COB but shattering to him."

ETCM (SS) Patrick D. James, COB of USS Philadelphia (SSN 690) with model of sub's class. TMCM (SS) J.E. Chappell, left, and TMCM D.H. Padgett among tools of their trade



What do chiefs of the boat like most about the job?

"You're a catalyst for the crew . . . being able to serve the crew," Chappell answered.

James said, "When sailors can't get satisfaction from other people the standard comment is, 'I'll go see the COB.'

Padgett enjoys "being able to get jobs

done that other people can't or don't know how to solve."

Where do COBs go when they have problems?

Padgett talks to the command master chief at the next level.

James said, "Sometimes, when you get to the saturation point, you go on leave."

Chappell said he often went to his fel-



low chiefs on his boat or to the wardroom.

Dobrolet answered, depending upon whether the problem is his or someone else's, he goes to the squadron command master chief or to his commanding officer or executive officer.

COBs in Submarine Group Two also consult each other about problems at weekly meetings when in port, Padgett added.

Asked whether there was a letdown after leaving the job of chief of the boat, Padgett responded, "Yes, going from being in charge of 112 people to yourself."

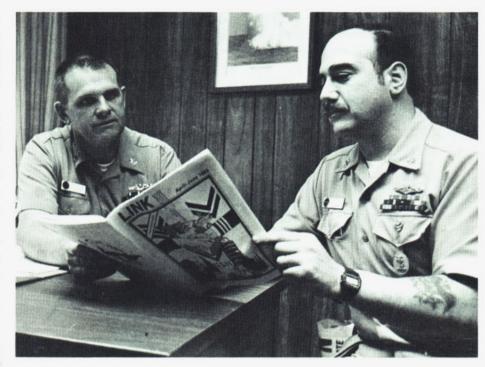
Chappell said when he went to another ship which already had a chief of the boat after his own COB tour, he had to "shift down because of a tendency to overstep your bounds." But, he added, "You can take a lot of weight off the COB's shoulders."

Chappell said there isn't any special training to prepare someone to be a chief of the boat. "When they start hanging those stars on you, it comes with the territory."

James said NMPC has a big demand for people wanting to earn the COB Navy enlisted classification code—9579. Most COBs are detailed to their jobs directly by NMPC, while some get the job through a request to NMPC by their commanding officers.

Lieutenant Commander Thomas H. Etter, *Philadelphia*'s executive officer, said, "Quite frankly, a submarine couldn't run





without a COB. The better the COB, the better the submarine. He keeps all of us out of trouble.

"I don't have to get involved in a lot of things because he takes care of them. He's got a piece of the pie of just about everything that deals with people."

In *Philadelphia*'s case, Etter added, much of the COB's interaction is with the CO, XO and department heads, enabling the COB (James) to provide overall coordination between departments and divisions—just like in the manual.

"One of the most important jobs of an executive officer is to back up the commanding officer. I see the COB in the same role with the XO," Etter added.

Master Chief Quartermaster (SS) Ray J. Pollick was COB aboard USS *Lafayette* (SSBN 616) for about 30 months. "It's really satisfying to take these young men and see them become responsible people. To take the crew and meet whatever commitment or assignment."

As COB, Pollick added, "You get an input on everything."

Of his 20 years in the Navy, nine were in USS *George C. Marshall* (SSBN 654), reporting as an E-4 and leaving as an E-7.

"The submarine service has led the way in appearance, pride and professionalism, the whole ball of wax," Pollick said. "There was no excitement for me to come

Above: TMCM (SS) Bud Atkins, left, and TMCM (SS) Barry Russack, COBs of the submarines Alabama (SSBN 731) and USS Kamehameha (SSBN 642), respectively. Below: TMCM (SS) Robert A. Cochran served as COB aboard three submarines.

to shore duty. COB is a fun job. Once you get the confidence of the chiefs' quarters and the crew, there's no doubt they'll work for you."

As a COB, Pollick said, "Some of the guys just want to use you as a sounding board" after using the chain of command.

"You can't insulate yourself. You can't just sit up in the chiefs' quarters. If you don't talk with the members of the crew, you're not going to know what's going on, no way in hell."

He feels strongly that more chiefs who have what it takes to be a COB—but don't want the responsibility—should change their minds or take the consequences.

"People who are offered the job of COB and turn it down should have the refusal entered in their records," he said.

He likes his current job as master chief of the submarine school's enlisted basic training department, because he can help ensure when a boat gets a sub school graduate "that command has a responsible individual. We're not looking so much for the guy that's four-O as the guy you can count on."

Master Chief Torpedomen's Mates (SS)

Chief of the Boat

Barry Russack and Bud Atkins are COBs of "boomers"—fleet ballistic missile submarines—and also have years of friendship in common.

Russack, blue crew COB of USS *Kamehameha* (SSBN 642), said he enjoys having the power to solve a problem.

"You've been through 20-odd years in the Navy. Finally you're in the position to do something about it. Above all, I like to be a helping person and that's what a COB is."

Atkins, former COB of *Kamehameha*'s gold crew and now in the same role with the pre-commissioning crew of *Alabama* (SSBN 731), said he likes "molding the crew together. Taking these young people and teaching them how to be sailors."

Atkins, ex-blue crew COB of USS *Michigan* (SSBN 727), said, "When I came into the Navy, all I ever wanted to be was the COB."

Russack added, "It's the pinnacle of your profession for a submarine sailor. The people you find in this job want to be in the job or they don't last long. We cause things to happen through communications."

Aboard Kamehameha, Russack said, there are people with expertise in legal, real estate, automotive and home maintenance matters available to shipmates and their wives. While his boat is in port, Russack said, he sees an average of four wives a week—counseling them on personal finances and other matters.

With the dual crew concept on FBM submarines, Atkins said, while the blue crew is deployed, for example, the gold crew helps the blue crew's families.

"Just about every FBM has that. Taking care of crew members and their families saves a lot of money they'd otherwise spend for outside help," Russack added. Atkins also said a COB's wife is often the submarine's ombudsman or is otherwise involved. "For example, my wife runs the phone tree."

"The COB's wife has seen the problems, she's been there before," Russack added. "I'm deploying next week and my wife's already got her first call from another wife saying she can't attend a coffee. Pat's answer to that is, 'You can either cry by yourself or come and cry with friends.'"

Yeoman First Class (SS) Bryan Plourde, of the Submarine Group Two staff, worked "more or less directly" with three COBs during five years aboard USS *Nathanael Greene* (SSBN 636). Plourde has positive memories of one COB.

"He was a machinist's mate. Any time you had a problem you could talk to him about anything. If he thought the crew was getting a raw deal on something, he wasn't

Father and Son - Parallel Careers

Many of his fellow master chief petty officers affectionately call him "Pappy"—with good reason.

Master Chief Electronics Technician (SS) Ray R. Kuhn, 66, is a friendly man who's old enough to be the father of many master chiefs at the Submarine Base at Groton, Conn. And, in fact, he is the father of a master chief, Ray Jr., a machinist's mate stationed on the West Coast.

The senior Kuhn, command master chief of the submarine school in Groton, wears 11 Good Conduct Medals and has 39 years of active duty to his credit.

A native of Manchester, N.H., Kuhn joined the Navy in September 1944 after working in a foundry at the Portsmouth Naval Shipyard in his home state. Kuhn was drawn to the Navy during four years as a civil servant in the shipyard where submarines and other ships were built and repaired during World War II.

Although Kuhn was 27 years old and the father of two children when he enlisted, he said he was first drawn to the Navy when a sailor who addressed his Boy Scout troop favorably impressed him.

Kuhn worked as a refrigeration mechanic on Saipan during the end of World War II and saw no action. He said a typical work day was from 7 a.m. to 10 p.m. "Parts were hard to get and when you couldn't get them you had to make them."

The master chief said he became a plank owner of the carrier USS *Valley Forge* (CV 45) in 1946. Kuhn said he wanted to serve



on submarines from the first but didn't get a chance until 1947.

A second class machinist's mate at the time, Kuhn said he was assigned to the diesel submarine USS *Cabezon* (SS 334) four months after solving the ship's refrigeration problems. "I knew every bolt, pipe and wire on that ship," he said proudly.

Kuhn got a previous set of orders to Naval Air Station North Island in San Diego changed in order to get his start in submarines. He served aboard *Cabezon* for two years and was aboard USS *Caiman* (SS 323), his second ship, six years. In all his years in the Navy, Kuhn said he served 17 of them in subs.

He also served aboard USS *Chivo* (SS 341) and USS *Dogfish* (SS 350). Kuhn served as chief of the boat for the first time in *Dogfish*. He also was COB during tours aboard the fast attack submarines USS *Sargo* (SSN 583) and USS *Bergall* (SSN 667), plus the fleet ballistic missile submarine USS *George Washington Carver* (SSBN 656).

While he was a first class petty officer,

afraid to tell the XO or the captain."

Yeoman Second Class (SS) Bradley Cox, also of the SubGru Two staff, served aboard two boats for four of his six years of active duty.

"I've always had good COBs. They're good because they're the link to the CO and the XO. They're someone you can really go to if you have a problem.

"If I did have a problem—other than my leading petty officer—he's the guy I'd go to. I think they're real important in a command. Officers and enlisted men are separated enough. The COB is somewhere in between."

Commander J.L. Foote, a staff officer and former enlisted submariner, served aboard four boats.

"I think COBs are essential," he said. "From the top looking down—for the command—you could use the words 'trusted adviser' to describe a COB. As a junior officer, the COB can help you in many ways."

Foote, whose last tour aboard a submarine was as a department head, said, "I can remember often going to the COB and getting opinions about somebody. You don't realize what an influence he has on the enlisted men, on the officers and on the command, until you get aboard ship."

The commander said when the command master chief program began, "The rest of the Navy just got in step with the submarine service," which used COBs in the same capacity for years.

Of the COBs and command master chiefs in Groton, Master Chief Fire Control Technician (SS) P.J. Melher fills the senior enlisted billet in the area.

A 22-year veteran, Melher served on five submarines and was COB of one—USS *Dallas* (SSN 700)—before becoming command master chief of Commander.

Submarine Development Squadron 12, his last job. At the squadron level, Melher was mentor to six COBs. Currently, he technically advises COBs from 25 submarines, three squadron command master chiefs, plus 19 command master chiefs of area activities.

He fondly recalls his days as COB aboard *Dallas*. "That was my goal from the day I made chief. It was the most rewarding job I've had. You get satisfaction from helping the guys."

Master Chief Radioman (SS) Jon R. Sutton holds the senior enlisted submariner's job on the East Coast. Sutton, who's been the SubLant force master chief for a year, is a former blue crew COB of USS Francis Scott Key (SSBN 657).

Between his COB tour and his current position, Sutton served as command master chief of Submarine Group Six in Charleston, S.C. "As COB," he said, "you're responsible to each crew member. Basically, the COB runs the boat through the chiefs' quarters" and is responsible "for the overall smooth running of the boat."

A 25-year veteran, Sutton served aboard five boats. As a COB, he said, "no two days are the same. It keeps you interested and on your toes."

In comparing his job as COB to his following tours at SubRon Six and SubLant, Sutton said, "There's a larger volume of problems as you go up, but I've always been fortunate in having good bosses—good admirals and good commanding officers."

By virtue of his position, Master Chief Electronics Technician (SS) Jack Farris may be the best known COB in the Navy to other COBs that is.

Farris, who was COB in USS *Puffer* (SSN 652), is detailer for the 602 people with the 9579 NEC. "I have many more candidates than I have billets," he said. As of June, Farris said, there were about 180 COB billets, including new construction.

"The normal tour is 36 months, with a minimum of 24 months," said Farris. He added that not a single submarine on the West Coast would have a COB position opening up for a six-month period.

Kuhn changed his rating twice—first to engineman and then to electronics technician. He hasn't had a promotion in 15 years, having become a master chief petty officer in 1968. He became a senior chief petty officer in 1964. Kuhn was advanced to CPO—then the Navy's top enlisted grade—in 1956 while serving aboard *Chivo*.

His son donned the two stars of a master chief in 1978, 10 years after his father. A continent apart now, the Kuhns served in the same command once and in the same area on other occasions.

Their first time together was early in Ray Jr.'s career when he received Enterprise nuclear prototype training in Arco, Idaho, while his father was an instructor there for the Nautilus nuclear prototype course. They were aboard different submarines out of Pearl Harbor, Hawaii, for three years and also became plank owners of George Washington Carver. Ray Jr. made chief aboard that submarine where his father was COB. When Ray Jr. went through CPO initiation, his dad was the judge.

The elder Kuhn also has four daughters—three of them married—and 13 grandchildren.

A 40-plus-year man, the elder Kuhn said

his son plans to retire in 1985—ahead of his dad. ETCM Kuhn said he may go to college when he retires, but that he will probably do a lot of skeet shooting, fishing and golfing also.

Although no longer physically qualified for submarine duty, Ray Sr. said shore duty jobs don't have the satisfaction a COB's job gives. Since leaving *Bergall* as COB in 1976, he has served ashore in New London.

"All tours are good and the thing that makes them good is the people," Kuhn said. "Knowing your people is the key to the whole problem."

Ray Jr., command master chief of the Spokane, Wash., Naval and Marine Corps Reserve Center, served aboard five submarines since enlisting in November 1958.

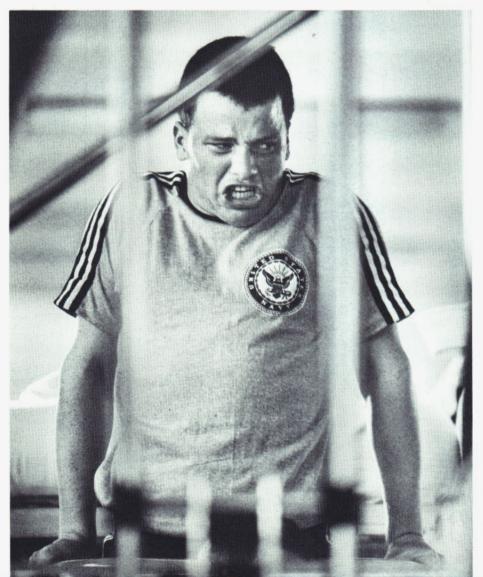
The younger Kuhn also was the top enlisted man at his last command—USS Shark (SSN 591)—where he was the COB. Following in his father's footsteps—joining the Navy, choosing submarine service, becoming a master chief and a COB—isn't something he necessarily set out to accomplish.

"It just was a natural thing to do," he said. "Once I was in, I never considered anything else."

Pumping Iron the SPARTEN Way

Recruits Undergo Experimental Weight Training

By PH2 Jesus Diaz, FltAvComPac



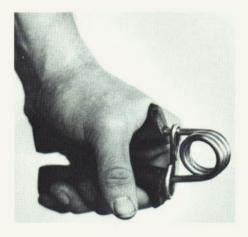
Remember the sounds of boot camp? The firm voice of your company commander giving instructions? Barked orders? Cadence? The rhythmic beat of heels digging into the asphalt? Now add a new sound: the clang of weights.

A special group of Navy recruits is undergoing experimental multistation weight training at Recruit Training Command San Diego. The training, called SPARTEN (Scientific Program of Aerobic and Resistance Training Exercise in the Navy), is the Navy's answer to a DoD directive ordering the military services to develop physical training programs to meet the specific requirements of their people.

Lieutenant Ed Marcinik, an exercise physiologist at the Naval Health Research Center, San Diego, developed the Navy's program following a shipboard study. The 15 exercises in the experimental training include bench presses, pull-ups, two-arm curls, knee extensions, arm dips, handgrips and sit-ups.

"The objective is to build strength and increase performance—not body building," said Marcinik. "Since it's so fast-paced, the heart rate is elevated, improving stamina and aerobic fitness."

The SPARTEN company recruits and standard company recruits were compared before and after the eight-week training period. The SPARTEN company's most



significant improvement was in upper-body strength—a 13-percent increase compared to no increase in the standard company.

The SPARTEN recruits think the program has really helped them. "I had been weight lifting for two years before joining the Navy," said Seaman Recruit Carlos Cirvillo, "but SPARTEN is better than anything I've done before. The Universal gym works every part of the body, and I've seen great improvement in my physical fitness."

Chief Hull Maintenance Technician Wayne Tart, SPARTEN company commander, agrees. "I really like the SPAR-TEN program. The morale among the re-



cruits is great. Normally a couple of recruits get dropped because of injuries, but, this time, we didn't have any injuries."

Marcinik hopes the SPARTEN program will expand throughout the Navy. If the program is approved, every recruit company at RTC San Diego, and possibly RTC Orlando, will have a weight-training device in their barracks. Marcinik is now

taking his program to the fleet by visiting ships with exercise facilities in an attempt to educate sailors in the SPARTEN method of weight training.

Recruits in the SPARTEN company work out with the Universal gym. To save time, the weighttraining device is located in their barracks rather than in the gym.



OCTOBER 1983

PHM Port Change

Journey to Key West

By PH1 Harold Gerwien, FltAVComPac

On board the Long Beach, Calif.-based tank landing ship, USS *Racine* (LST 1191), most of the crew were topside, standing by the rails. But the sailors weren't there just to enjoy the tropical night air—they were witnessing the ship's transit through the Panama Canal.

Along with *Racine* were two of the Navy's newest patrol combatant missile (hydrofoil) ships, USS *Hercules* (PHM 2) and USS *Gemini* (PHM 6), which had begun the journey last spring from the Puget Sound Naval Shipyard at Bremerton, Wash. Both PHMs were moving to their new home port at Key West, Fla., and *Racine* was their escort.

The cruise took the ships down the Pacific coast of the United States and Mexico, with port calls in San Francisco and San Diego, and Acapulco, Mexico. At the Pacific side of the canal, *Hercules* and *Gemini* entered the lock ahead of *Racine*. The locks raise a ship 85 feet above sea level to man-made Gatun Lake. When they cross the continental divide, the ships pass through another series of locks which lower them back to sea level.

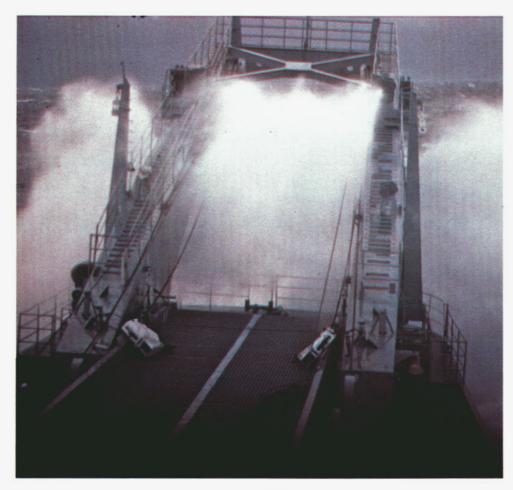
Then came *Racine*'s turn. Six electric mules (locomotives), three on each side,

attached cables to *Racine* and moved the ship into the 1,000-foot-long, 110-foot-wide lock. The large gates closed behind the LST, and water poured into the lock, slowly raising *Racine*. Through the canal's six locks, three raising and three lowering, a total of 52 million gallons of

water was used to move *Racine*. This same amount of water could serve a city with a population of 350,000 for an entire day.

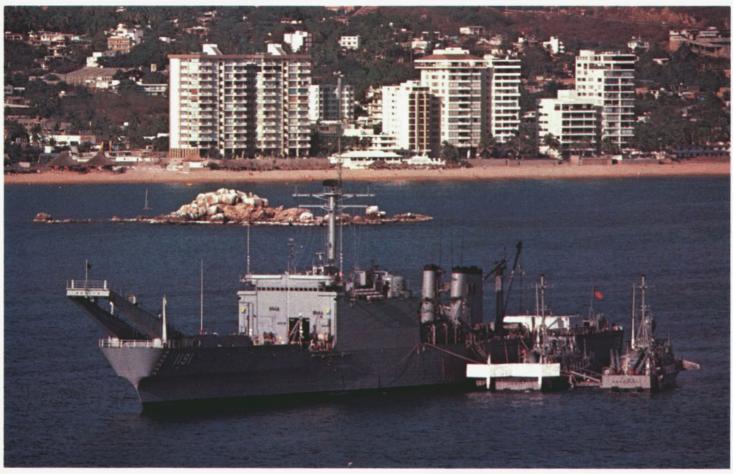
In 1914 when the canal was completed, there were no ships as big as *Racine*, but engineers planned for the future. Now, almost 70 years later, ships much bigger





Opposite Page: USS Racine (LST 1191), USS Gemini (PHM 6) and USS Hercules (PHM 2) prepare to get under way. Left: A wave breaks over Racine's bow during a storm at sea. Below: The LM-2500 gas turbine engine pushes up to 90,000 gallons of water a minute from the ship's stern. Bottom: The three ships outlined against the hotels of Acapulco.





Port Change

than *Racine* are easily accommodated in the locks. Canal records show that a U.S. aircraft carrier moved through the locks with only a 7-inch clearance on each side!

In a day, Racine, Gemini and Hercules were in the Atlantic Ocean, and in three days the PHMs arrived at Key West, and Racine's mission as escort came to an end.

"Racine was tasked as escort for the PHMs three months before the cruise," said Captain Eugene Bailey, the ship's commanding officer. "The crew worked feverishly preparing for the transit. As escort, we were responsible for their fuel, pay, mail, food, medical assistance and ships services."

A Naval Reserve Force ship, *Racine* is employed in training reservists on their duty weekends and during the two week active duty period required annually of all drilling reservists. Sixty percent of *Racine*'s crew is made up of active duty sail-

Upper right: Calm water and bright lights greet the ships as they approach a set of locks of the Panama Canal. Below: Capt. Eugene Bailey, Racine's commanding officer, shouts orders to personnel below.



ors with the remaining 40 percent made up of reservists.

The landing of tanks and heavy equipment on a hostile beach during an amphibious operation is *Racine*'s primary mission. But *Racine* and crew served several other functions for this trip. Their mission was to offer support to the PHMs and provide space for 16 personnel and

four support vans from Mobile Logistics Support Group.

"MLSG was created to supply full support to the PHMs," said Interior Communications Electrician First Class John Hartley. "We could be compared to a Shore Intermediate Maintenance Activity, only we are fully mobile, and with our selfcontained vans, we can go wherever the





PHMs might be operating."

Most of the sailors seemed to have more than a casual interest in the canal and its history. The French had begun construction on the canal in 1880, but after six years and 20,000 or more deaths due to malaria and yellow fever, they gave up. Eventually a cure for malaria was found, and over a 34-year period, the canal was finally finished.

The calm Panama night the sailors were experiencing was a great contrast to the weather they dealt with when they first left Bremerton. Shortly after entering the Pacific, 40- to 50-knot gusts had created 15- and 20-foot seas.

"I guess you could call it our baptism," said Gas Turbine Systems Technician Second Class Dennis Ammerman of *Gemini*. "We learned a lot in the first few days of the storm, especially when it came time for underway replenishment with *Racine*.

Right: At anchor in Acapulco harbor. Below: Hercules crew members handle lines during underway replenishment with Racine. Lower right: GS2 Steve Miller monitors Gemini's operation at the engineer's station. On our first refueling, only seven out of the 21 members of the crew were not directly involved in handling lines."

"It seems that for the UnReps all we did was pull lines. We're strong enough to be a winning Navy tug-of-war team," said Gas Turbine Systems Technician Second Class Steve Miller of *Gemini*.

"I always wanted to be in a small command," said Mess Management Specialist First Class Marty Hruz. "We're so small that everyone on board has at least three







Port Change

other jobs to do along with their primary one."

"A billet in a PHM will either make you or break you," added Ammerman. "When you consider that we are working in shifts of six hours on and six off, we have to be pretty tight. In my many years in the Navy, I have never worked with better petty officers and officers than the people we have aboard *Gemini*."

Serving in PHMs has several different meanings to each crew member, but the common denominator is professionalism.

"Most of the guys are handling the job of a chief petty officer or junior officer," said Lieutenant Commander D.R. Carlson, *Gemini*'s captain. "Each crew member was thoroughly screened and hand-picked—they're maintaining a \$100 million, high-technology ship."

Even though the storm lasted several



days, it didn't deter *Gemini* or *Hercules*. The task of UnRepping became a little easier each time. A common frustration to the PHM crews during the storm was that the seas were often too rough for the

ships to become foil borne. When a PHM becomes foil borne, the hull actually rises from the water and the ship flies.

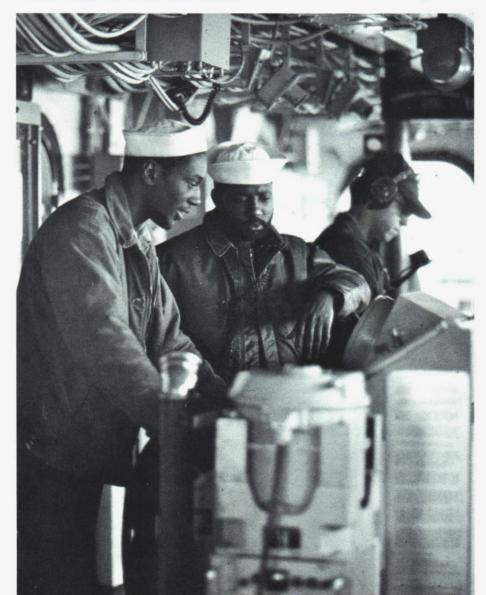
It takes a lot of power for a PHM to become foil borne. For hull-borne operations, PHMs are powered by two Mercedes-Benz diesels, but when they want to fly they're powered by General Electric LM-2500 jet engines, the same used in the DC-10 airplane and in *Spruance*-class destroyers.

PHMs aren't equipped with screws like a conventional craft. They're propelled, and, during foil-borne operations, the LM-2500 is pushing 90,000 gallons of water a minute out the fantail, allowing the ship to travel in excess of 40 knots.

The night transit was almost over. In another hour the day would dawn. Racine entered the last lock while Hercules and Gemini awaited their escort so they could all continue on the last leg of their journey to Key West.

During the next month, *Racine* visited Cartagena, Colombia. While there, medical supplies, books and other educational materials, and food stuffs which were donated under the handclasp program to needy schools, hospitals and orphanages were distributed.

Then it was back through the canal for *Racine* and home to Long Beach. Another successful Navy operation had been accomplished.



Left: Bridge watch on Racine. Above: Gemini can travel at 35 plus knots when foil-borne.

SIMA:

Providing Alternatives to a Growing Navy

When the Shore Intermediate Maintenance Activity at Mayport, Fla., became operational in June 1982, it became the first of the surface SIMAs to combine all maintenance and administrative facilities under one roof.

SIMA, Mayport will support more than 40 conventional ships within seven classes, ranging from aircraft carriers and destroyers to frigates, auxiliaries and minesweepers.

The facility has some 8,000 feet of existing pier, with another 1,495 feet under construction and an additional 1,000 feet approved for future construction.

The new SIMA houses 44 work centers which are located in high and low bays. The hull and machinery shops that handle large major repairs are located in the higher bays, which have 20-foot overheads and cover 40,000 square feet. The low bays house other work centers such as the inside and outside machine shops and the pump, valve and internal combustion shops.

All shops are custom-built according to function and are equipped with the latest in the state-of-the-art equipment. In addition, many centers boast monorail transporters attached to the overhead for moving heavy objects. For example, in the engine shop a diesel engine can be trucked into the building, hoisted onto the monorail, degreased over a grated liquid-collection floor, repaired and moved from the shop with far less manual effort than at the old SIMA, Mayport.

The welding areas are equipped with fume-exhaust systems as well as tinted plastic curtains which allow light in while still affording eye protection to people working outside the welding shop.

In the boat shop, the overhead and bulk-

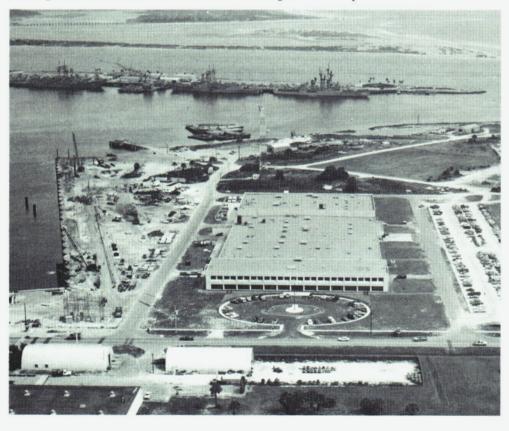
heads are covered with acoustic tile to reduce noise, while in the carpentry shop vacuum exhaust systems remove sawdust from the air and work site.

Work centers are located according to the work flow so that each center is adjacent to ones performing a related function—the inside machine shop is next to the outside machine shop, the shipfitter shop is across from the weld and sheet metal shops, and the boat shop is beside the carpentry shop.

Although SIMA, Mayport is the first facility in the program to be completed, upgrade work was first begun at SIMA, San Diego where old and inadequate buildings were demolished and one new building constructed and another modernized. SIMAs are also under construction at Norfolk, Va.; Charleston, S.C.; and Little Creek, Va., and should be operational within three years.

The future of SIMA development looks bright. As the size of the Navy increases, additional homeporting will tax the capacities and capabilities of existing repair ships and shore facilities.

Navywide, the new SIMAs will economically repair assigned ships on an intermediate maintenance level while also allowing traditionally seagoing enlisted men an opportunity to enjoy shore billets and to acquire new technical skills before reassignment to ships.



OCTOBER 1983

Bearings

War College Gift



In a recent ceremony at the State Department in Washington, D.C., retired Chief Equipment Operator Frank A. Abbate, (center) presented a handcrafted plaque to Ambassador J. William Middendorf, II, (right) president of the Naval War College Foundation and a former Secretary of the Navy. Chief Abbate's son, Frank, a Department of Defense employee, looks on. Abbate made the plaque to honor the war college's centennial and also to mark the occasion of his son's recent graduation from the war college. The plaque is made from rare dyed woods fitted together in a process called marquetry. It took Abbate 10 months to craft the plaque valued at more than \$2,000.

Captain Umps Little League World Series

"I love the kids and enjoy helping them grow and mature, especially in athletics," said Navy Captain Wilbur D. Jones Jr., a volunteer Little League umpire who was selected to officiate at the 1983 August Little League World Series in Gary, Ind.

Jones has been involved with Little League Baseball since 1972 when his two sons played. He started out umpiring games within his community and then went on to district, state and regional games. Now, it's the World Series, where teams from all over the world will compete for five days in a double-elimination tournament.

Jones, regional representative for the 14 Southern states, is joined by 11 other umpires—two from Canada and the remainder from around the country—all rated and appointed by the Little League Associa-

tion board of directors as the best in the business.

According to Jones, "I've spent well over 2,000 hours and umpired at least 600 games since I started, and there are volunteers just like me who have done even more." At his own expense, he will take leave and travel to Indiana for the event, scheduled for Aug. 15-20.

Jones is on the staff of the Deputy Chief of Naval Operations, Logistics. He is a senior member of the Fort Hunt Youth Athletic Association of Mount Vernon (Va.), on the board of directors and head of youth basketball. He not only officiates for the Little League but also for the American Legion, high school and college ball programs.

—JO2 Russell Coons

VP-31 earns triple awards

Friday, May 13, was far from a fore-boding day for the sailors of Patrol Squad-ron 31 based at Naval Air Station Moffett Field, Calif. It turned out to be a triple header of good tidings when VP-31 received the Meritorious Unit Commendation, Chief of Naval Operations Aviation Safety Award and the Golden Orion Award.

The "Black Lightnings" received the unit commendation for exceptional achievements in training, which were a major factor in dramatic increases in overall readiness of Pacific Fleet patrol squadrons.



Commodore Daniel J. Wolkensdorfer,
Commander, Patrol Wings, U.S. Pacific Fleet,
and Cmdr. C.T. Moyer, VP-31 commanding
officer, display the Meritorious Unit Commendation pennant the squadron earned for fleet
replacement training in fiscal year 1982.

— Photo by PH2 Kelly A. Cross.

The safety award, given annually to the patrol squadron with the most outstanding safety record, went to a fleet replacement squadron on the West Coast for the first time in 19 years. VP-31 has amassed 20,000 sorties and 132,866 landings free of major mishap in more than 10 years of flying.

VP-31's positive approach to retention allowed the squadron to re-enlist 54 percent of their first-term sailors, thereby earning the Golden Orion Award.

-By JO1 Nancy J. Dodge, VP-31

USS Bristol County Adopts a School

USS *Bristol County* (LST 1198) has joined hands with the San Diego County Department of Education to make the first adoption of a school under the Navy's recently established adopt-a-school program.

In recent ceremonies, Captain Carl Weegar, commanding officer of the 8,450-ton tank landing ship, officially adopted the school and said, "This was pure gold. There are a lot of great people in my command and in this school. I know we can sustain the energy we found here today."

The program is designed to engage the partners in a series of joint projects to expand the student's knowledge of the adopter's job. The Montgomery Junior High students will be hearing guest lecturers on such topics as navigation, electronics, engineering and the importance of safe international waterways.

"This really makes us proud," said Dr. Mary Anne Stro, principal of the 1,400-student school. "We believe that great



Lt.j.g. Bruce Binney, who helped arrange the adoption, holds up a plaque presented by the students of Montgomery Junior High School to Bristol County.

things will come from this relationship. It's a chance for the kids to hear things from adults other than their parents and teachers."

While *Bristol County* is elsewhere in the world, the crew's involvement will not stop. A pen-pal program has already been planned, and the ship will donate maps to enable the students to chart *Bristol County*'s course during deployments.

Weegar summed up the ceremony when he said, "I can't remember when I last saw such enthusiasm and such a great group of kids. This exceeded everything I could have possibly expected."

Navy Man Earns Degree

Before Intelligence Specialist Second Class Richard Kay entered the military, he quit high school to help his family financially. But it wasn't long before he realized that a high school dropout didn't have much of a future. "I knew I wasn't going anywhere," he said, "and I also knew the armed services were educationally oriented, so I joined."

Initially in the Marine Corps, Kay was assigned in 1978 to Marine Barracks, Yokosuka, Japan, where he studied for and passed the General Educational Development test. Not content with a high school equivalency certificate, he took more classes until he received a high school di-

ploma from the Los Angeles Community College Overseas.

In September 1979, Kay started taking courses from Barstow College at Yokosuka, which he continued until he left the Marine Corps to join the Navy and become an intelligence specialist.

His first assignment was to the carrier USS *Midway* (CV 41) in familiar surroundings at Yokosuka. He immediately started taking college courses. He recently was notified that he will soon be awarded a bachelor's degree.

Kay has spent only three years pursuing his educational goals. After his hard work, is he planning to take a break from school? Not at all. "I remember a saying I once heard," he said. "Education is like a boat. Once you stop rowing, you drift. I'm planning to get my master's next."

-By Art Liberty

PN3 Jayson Law (right) helps IS2 Richard Kay figure the credits he will be granted for his military experience.



Bearings

Navy Boxer

His forearms glisten. Circling his opponent, he patiently waits for the perfect moment, eyes locked intently on his foe only inches away.

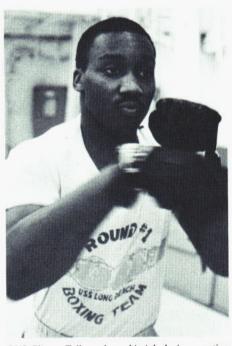
Then he attacks—a flurry of punches that catch his opponent by surprise. As quickly as he had jabbed, he steps back to slowly stalk again.

That was Personnelman Third Class Clinton Talbert's style in the Pacific Northwest Boxing Invitational at Naval Submarine Base, Bangor, Wash., held in January.

Talbert, who serves aboard USS Long Beach (CGN 9), follows his ship's motto-"strike hard, strike home." But the welterweight's boxing strategy began long before he joined the Navy.

"When I was a kid in Alton, Ill.," Tal-

bert said, "all the kids in the neighborhood went to the boxing center to work out. Most of them dropped boxing after a few years, but I kept visiting the center and became even more interested in the sport."



PN3 Clinton Talbert shows his jab during practice. Photo by PH2 J.W. Morrow.

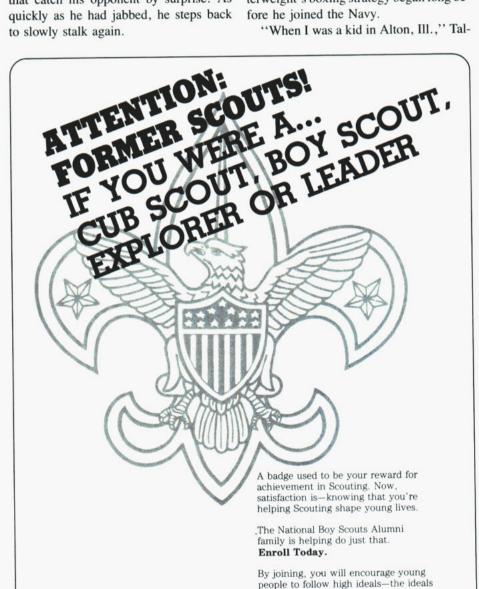
Persistence paid off. While his overall record shows 36 wins and 11 losses, Talbert has won all 14 of his Navy fights since joining the fleet.

Some of his titles include: 1980 Idaho State champion; 1980 Novice champion, Bellevue, Wash.; 1981 Eugene, Ore., Golden Gloves champion; runner-up in the 1983 Tacoma, Wash. Golden Gloves; 1983 American Legion Boxing champion; and three time (1981-1983) Pacific Northwest champion.

He credits his success to his coach and trainer, Cal Gilbert, a former Army boxer and trainer for 25 years. "I've won a lot of fights since I've trained with him. He's done a great deal for me and is an excellent trainer," Talbert said.

Talbert's goal is to join the Navy's Boxing Team and maybe even win the best prize of all—the 1984 Olympics.

> -By JO2 Daryl O. Desquitado USS Long Beach (CGN 9)



Write To:

National Boy Scout Alumni 1325 Walnut Hill Lane Irving, Texas 75062-1296

Scouting has always taught.

Now that's a Good Turn.

Alcohol and Drug Education Go to Sea

A USS Enterprise (CVN 65) sailor pursuing a college degree heard about a new course on board called "NDSAP" —Navy Drug Safety Action Program. He learned that he could earn 3.6 continuing education college credits for taking the course, which was described as "non-traditional." Group discussions and exploration of concepts in attitude and self-awareness sounded interesting, so he enrolled.

That was his way of getting into NDSAP. Your way may be different, but no matter how it happens, you can help the Navy win its war on drug and alcohol abuse by taking NDSAP (or the Navy's related alcohol safety program, NASAP).

These programs are not punitive, even though some sailors are required to attend when drug abuse is suspected. Neither are the courses designed for treatment or rehabilitation. They are simply 36-hour classroom courses where participants examine their beliefs and values about drugs and alcohol in light of basic facts. Through interaction with each other and with the group's facilitator, participants become aware of facets of substance abuse that are not generally known. The facilitator is a specialist, trained in teaching and counseling. He guides participants to a stronger awareness of drugs and alcohol, and of themselves, and helps identify and correct myths and misconceptions.

These courses impart valuable information. Supervisors who have taken the course are more capable of recognizing and dealing with substance abuse problems should they be identified in the work environment. People who have substance abuse problems learn constructive alternatives. Anyone and everyone who finishes the course obtains college credits.

NASAP (Navy Alcohol Safety Action Program) began in 1973 in response to a rise in alcohol-related accidents among Navy people. In 1980, a program for drug abuse arrived; it was patterned after the successful NASAP. It was created to expand the concept to other drugs potentially abused by Navy people. Since then, these courses have been offered at naval installations around the world.

Several ships, including USS Cleveland (LPD 7) and the aircraft carrier USS Constellation (CV 64), have embarked contract-civilian facilitators to offer NASAP and NDSAP courses to their crews. Until now, facilitators have been civilian. In the Indian Ocean, on board the Enterprise, this has changed.

Chief Yeoman Dave Roe, an 18-year Navy veteran, was named facilitator. He said becoming a facilitator was his goal since he became familiar with NASAP back in 1977.

"I've seen firsthand what alcohol can do to families," said Roe. "The Navy has these programs so that people will know what drugs do to your body and what kind of trouble they will get you into. For example, a lot of people don't realize that THC (the active ingredient in marijuana) can stay in your body for up to 45 days, and it destroys cells."

Aviation Boatswain's Mate First Class Dennis L. Bigger, working toward his certification as NASAP/NDSAP facilitator, is helping Roe with the courses. He alternates with Roe in presenting facts, leading discussions and asking thought-provoking questions:

"What is your personal opinion of someone who 'does drugs' on the job?"

"What would your friends think of you if you came to work 'high' or drunk?"

When these questions are asked, there is momentary quiet before participants offer their thoughts. Perhaps others don't agree, and the discussion is kindled. Words and ideas are expressed and debated until understanding is enhanced.

Recently, 52 sailors on *Enterprise* earned certificates and college credits by attending NASAP and NDSAP courses. The program adviser, Senior Chief Yeoman Clifford Batteau, considers the courses to be an unqualified success. He said that in the past, enrollment suffered because a "discipline stigma" was attached to them. He credits Roe and Bigger with doing a lot to change that impression.

"They're outstanding facilitators," he said. "Since they conducted the first course, we have been flooded with requests for another NASAP/NDSAP program."

-Public Affairs Staff, USS Enterprise.

ServScolCom Receives NCA Accreditation

The Navy's largest technical training facility, Service School Command Great Lakes, Ill., recently received accreditation from the North Central Association of Colleges and Schools. ServScolCom was the eighth Navy training facility to become accredited.

Such accreditation assures the Navy's education and training community, students in the programs and the general public that Navy training institutions meet the standards of quality and professionalism required of accredited civilian institutions.

Advantages of accreditation include a heightened recruiting tool by which potential enlistees can be assured of quality technical training. Should a sailor wish to pursue a post-secondary educational program, he or she can more easily receive college credit for courses taken at ServScolCom.

ServScolCom Great Lakes trains an average of 25,000 students per year. Courses run from two to 45 weeks and involve intensified technical training; military and civilian instructors teach courses which range from basic to advanced material.

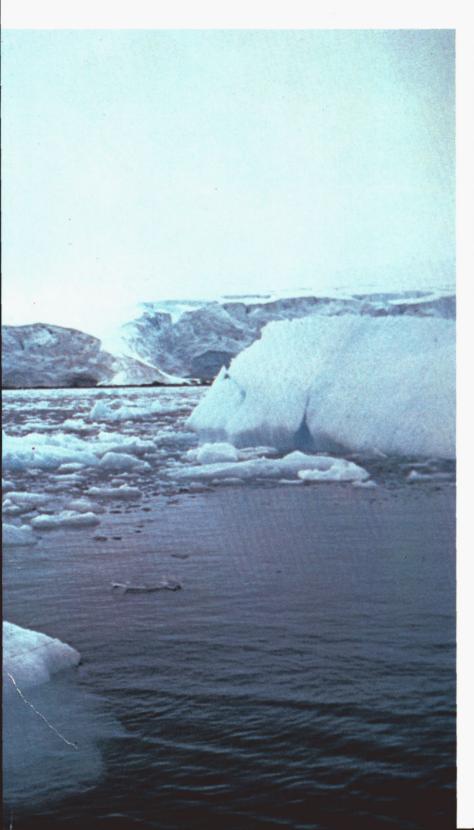
Polar Star

A Long,

By PA1 Ed Moreth, USCG



Lonely Cruise



It took 7,773 miles and 69 days around the coldest, most desolate continent on earth for the Coast Guard icebreaker *Polar Star* (WAGB 10) to complete its Antarctic mission of transporting scientists and an inspection team from the U.S. State Department.

Scattered ice fields seemed to go on forever as *Polar Star* crunched through the final part of its voyage. Lookouts in the crow's nest 105 feet above the water continually reported iceberg sightings to the officer of the deck on the bridge below.

Polar Star's crew was getting edgy, and they joked among themselves about "Antarctic trauma." They were more than ready to get back to warm waters.

But the long, lonely cruise paid off. The 165member crew accomplished several important mis-

Left: USCGC Polar Star (WAGB 10) anchors off the U.S. station at Palmer Peninsula. Below: Polar Star escorts the MSC tanker USNS Maumee (T-AOT 149) in McMurdo Sound. Each year, a Coast Guard icebreaker is sent to the Antarctic to escort supply ships.



Polar Star





Above: Don Carter lists the scientific stations (under host nation flags) visited by Polar Star's helicopters in the Antarctic. Right: A Soviet scientist (right) of Molodezhnaya Station shows visitors a chart of the area. From left to right: Army Col. John Raymond, Navy Cmdr. Maria Kazanowska and Coast Guard Cmdr. Robert Hammond, Polar Star's executive officer. Upper right: A Polar Star crewman protects himself against minus 30-degree weather.

sions, including becoming the first Coast Guard icebreaker to circumnavigate the Antarctic continent. The 399-foot ship had left its home port in Seattle on a voyage that took it 32,112 miles by the time it returned home.

The primary mission was to transport a four-member inspection group, headed by Dr. Albert S. Chapman, for visits to selected research stations.

Chapman, the State Department's polar affairs officer, said the inspection is conducted to find out what scientific research projects are being conducted and to ensure each signatory to the Antarctic Treaty abides by the pact. "We try to keep alive the idea of an on-site verification by vis-



iting stations in Antarctica about every three years," he said. The United States, Chapman said, conducts the inspections on behalf of all treaty members and is the only nation to do so.

Twelve nations signed the treaty during









Left: The icebreaker stops in 7-foot thick ice during its transit around the continent to allow crew members to stretch their legs. Above: National Science Foundation's vessel Hero anchors in Arthur Harbor off Palmer Station. Top: With winds close to 40-knots, Coast Guard helicopter pilots tie down their chopper's blades at the Argentine station.

Polar Star

the 1959 International Geophysical Year, agreeing that the frozen continent should be dedicated to peaceful purposes. Poland and West Germany have since joined the pact.

Chapman said the group looks for evidence of nuclear weapons, dumping of radioactive waste, fortification of stations and other warlike activities that are prohibited by the treaty. Amendments to the treaty, he said, were made to protect wildlife and the environment.

During the cruise, Chapman's team visited 14 outposts belonging to Argentina, Australia, France, Japan, South Africa, the Soviet Union, the United Kingdom, the United States and West Germany.

U.S. Navy Commander Maria Kazanowska, who has an oceanographic background and a previous polar trip to her credit, served as interpreter for the visit to the Russian station.

Most of the stations were conducting research in geophysics, glaciology, meteorology and marine biology. The inspection teams were flown from *Polar Star* to the stations by a Coast Guard helicopter.

Chapman said the inspection was the seventh since the treaty went into effect. In 1964, the Coast Guard icebreaker *Eastwind* (WAGB 279) carried the first group to the Antarctic. That ship carried another inspection team in 1967. In 1971, the Coast Guard icebreaker *Staten Island* (WAGB 278), on a similar mission, was forced to

turn back after striking an uncharted pinnacle.

According to the National Archives and Records Service in Washington, D.C., only eight ships have circumnavigated the Antarctic. HMS *Resolution*, a sailing vessel commanded by Captain James Cook, was the first in the 1790s. In 1932, another British ship, RRS *Discovery II*, made the first trip around the continent during the winter.

U.S. Coast Guard ships began cruises to the region in the early 1950s, when the Navy still had its own icebreakers. For example, *Glacier* (WAGB 4), a former Navy icebreaker, has visited Antarctica on every Operation Deep Freeze since 1955. The 310-foot ship was turned over to the Coast Guard in 1966, a year after that service took over icebreaking responsibilities from the Navy.

Scientists sponsored by the National Science Foundation also took advantage of the *Polar Star* cruise. Dr. Albert Erickson of the University of Washington conducted a visual census of the south polar seal and whale populations.

Sheldon Fisher and Lisa Ferm of Hubb's Seaworld Research Institution, San Diego, conducted underwater acoustic censuses of the seals and whales, comparing them to Erickson's figures.

Two men from the University of Southern California took censuses of birds, while two other university groups studied krill, the primary food source for nearly all Antarctic wildlife.

But aiding science and inspections were only two of *Polar Star*'s missions.

Including Christmas, the ship's crew spent four days offloading 350 tons of supplies and 120,000 gallons of fuel for the American Research Station Palmer. And *Polar Star* broke a passage through the 7-foot-thick ice to McMurdo Station so that a tanker and freighter could resupply America's main Antarctic station for the winter. In 36 hours, *Polar Star* broke through the ice in what took the older *Wind*-class icebreakers two weeks to complete.

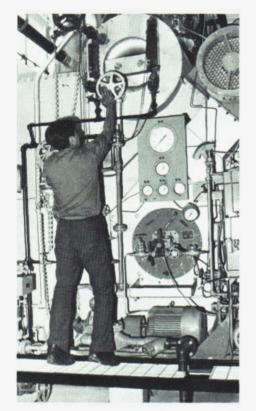
Once it broke through, the icebreaker spent three days widening the channel before escorting in the tanker.

Captain Joe Smith, *Polar Star*'s commanding officer, said the cruise was a complete success. "We started out with a game plan and hit it on the button all the way around. We not only completed what we set out to do, but we added two additional stations to our inspection list," he said.

The captain attributed the success to good weather, lack of mechanical breakdowns and a fine crew. "We did it all," Smith said, "I don't think this trip could be duplicated."

Below: Polar Star's crew takes a break from operations to enjoy some "ice-liberty" during their voyage in the Antarctic.





Warfare Training at Phib School

Story by JO3 Tom Hyatt Photos by PH3 Mike Farrell

The Naval Amphibious School at Little Creek, Va., has been training the Atlantic Fleet in amphibious warfare since it was commissioned as a separate command in 1958. It is the only institution of its kind on the East Coast.

Sailors, soldiers, marines, members of armed forces of allied countries, and personnel of the Military Sealift Command are trained in supporting arms, shipboard weapon systems operation, amphibious operations and seamanship. The school trains more than 15,000 students a year in courses ranging from three days to eight weeks.

The most important instruction offered is ship handling. Radio controlled models of fleet ships operate in a 3-foot deep pool. Students get ships under way, steam through channels, and anchor or moor their vessels with a proportional response time to real seagoing ships of actual size. Following the miniatures, students move on to the only military model training complex of its kind in the world.

Four sit-in models—35-40 feet in length or 16-to-one reductions from their prototypes—ply the waters of Lake Chubb and Lake Bradford. Built of fiberglass and wood, and powered by battery driven electric motors, these models place the student in the same relative position he would be in were he on the bridge of a real ship. He has the same perspective and, with



scaled response, soon feels he is conning the real thing. (There are four classes of ships represented—amphibious transport dock, combat stores ship, frigate and destroyer. More are in the planning stages.)

"The greatest thing about this kind of training is that it saves the government immeasurable expense," said Captain Robert P. Lucas, commanding officer of the Naval Amphibious School. "When one considers the savings in fuel, man-hours and the avoidance of the ever-present danger of damaging one of our ships, this training is at the same time cheap, yet priceless."

The school motto reads, "Enter to learn, depart to serve." Using some of the most advanced training devices the Navy has, the Naval Amphibious School ensures that those who pass through its doors are ready for full-scale service.



'On the Roof Gang'

55 Years of Silence

By JO2 Thomas Leek, Naval Security Station, Washington, D.C.

Keeping a secret might be considered tough these days, but there's one group of Navy men who managed to keep a big secret for more than five decades. Perhaps the most exclusive group of men in the Navy's history—only 176 in number—they were a highly skilled, extremely dedicated and motivated group of professionals. What's more, they helped their country secure victory in the Pacific during World War II.

Known as the "On-the-Roof Gang," they were secretly trained in techniques of Japanese radio communications, at a school located on the roof of the old Main Navy building on Constitution Avenue in Washington, D.C. The organization they formed has since become today's Naval Security Group.

Their story was one of the Navy's bestkept secrets until a few years ago, when the veil of secrecy about pre-World War II intelligence operations in the Pacific began to lift. Now that their story is being told, a memorial to the "On-the-Roof Gang" has been built and an annual award established to recognize those who "carry the torch" of naval communications security—the cryptologists ("CT" rating).

The "On-the-Roof Gang" Memorial was dedicated June 17, 1983, at the Naval Security Station on Nebraska Avenue in Washington by Rear Admiral Paul W. Dillingham Jr., commander of the Naval Security Group Command at the time, and Lieutenant James W. Pearson, the second-senior surviving member of the OTRG. Thirty-five of the 90 living members of this special group were on hand for the

dedication of their memorial and the establishment of the annual "On-the-Roof Gang" Award.

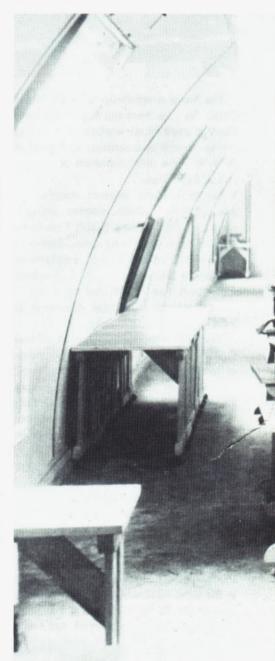
Admiral Ronald J. Hays, Vice Chief of Naval Operations, spoke to the surviving members of the "gang" who, with nearly 400 relatives and friends, gathered in the Navy Chapel on Nebraska Avenue to witness the ceremony on closed-circuit television.

"As we dedicate this memorial, you who are active members of the cryptologic community and are fortunate to be able to attend this dedication can reflect with great pride on the deeds accomplished by members of the "On-the-Roof Gang'," Admiral Hays said. "Not only will this memorial remind us of their accomplishments but the establishment of the OTRG Award for excellence in cryptology will also be a perpetual reminder of the forerunners of today's cryptologic technician."

The "On-the-Roof Gang" got its start in July 1928 when the U.S. government began to worry about a Japanese threat to the security of U.S. interests in the Pacific. Admiral Charles F. Hughes, then Chief of Naval Operations, issued a memorandum establishing a school for senior enlisted radiomen to be trained in "radio intercept work" beginning in October of that year.

Main Navy was chosen as the site for the school. Chief Radioman Harry Kidder

Special radio intercept operators worked in caves, tunnels and Quonset huts throughout the Pacific during World War II. Photo courtesy Rear Adm. Joseph N. Wenger Naval Cryptologic Museum.



and other radiomen who had learned the Japanese telegraphic code on their own were designated as instructors. Under heavy secrecy, the search for volunteers was begun throughout the Navy.

As the word got out to the fleet, commanding officers began looking for senior, skilled radiomen for this special assignment. The only guidelines they had were that nominees must ". . . have excellent records and be qualified in every respect for important and responsible duty. They must be known to be of high moral character and must desire this duty."

Among those interviewed, many had forgotten that they had agreed to partici-

pate by the time their orders arrived, and they really didn't know what they were getting into.

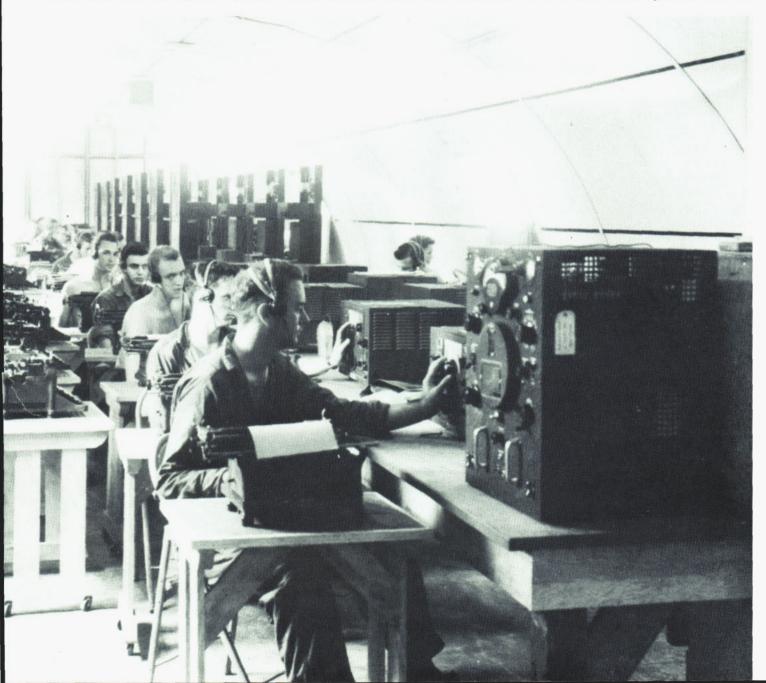
Retired Lieutenant Rexford G. Parr recalled his beginnings in OTRG: "I was a radioman aboard USS Smith in San Diego. I was asked if I'd like some special duty, and I answered 'Why not?' Nine months later, when I'd nearly forgotten about it, orders showed up. I was on my way to Washington,"

For 13 years, Navy and Marine Corps radiomen reported to Main Navy for training in the interception and analysis of radio messages. Their classroom, for security reasons, was a steel-reinforced

concrete blockhouse on the roof of the sixth wing of Main Navy. To get to class each day, the eight or so radiomen in each three-month course had to climb a ladder onto the roof. As a result, they began calling themselves "roofers" and "gumshoes."

Twenty-five classes, totaling 150 sailors and 26 marines, were trained there before World War II, when classes were moved to meet increased demand for intercept specialists.

After graduation, they were sent to stations in the Pacific and Asia such as Shanghai, China; the Philippines; Guam; and Hawaii. A few operators were as-



'On the Roof Gang'

signed duty aboard ships of the Navy and the merchant marine.

Secrecy was their life, war their job. Most OTRG members were in the thick of the Pacific war at one time or another. It was their job to intercept and pass on as much enemy information as they could. After the war broke out, many stayed with their radios until the last possible moment before they were evacuated as the Japanese advanced.

When operators at a particular station saw that evacuation was inevitable, they quickly destroyed all traces of their intercept work and moved out. One group of 70 operators, most of whom were "roofers," was evacuated from the Philippines to Australia by submarine. They narrowly missed being captured by the invading Japanese and survived many depth-charge attacks by enemy destroyers.

Retired Chief Warrant Officer Charles G. Quinn remembers: "I was at an intercept station on Corregidor. When the country fell, I was on one of the last submarines out—after General Douglas MacArthur!"

Others weren't so lucky. On Guam, operators at the radio intercept station Libugon were captured shortly after the attack on Pearl Harbor. For 45 months, the eight men (seven of them OTRG members) were in a Japanese POW camp. Before being taken prisoner, they had time to destroy the intercept station. The Japanese never knew about their special mission, and they all returned home safe at war's end.

Admiral Hays spoke about the special qualities in these men that kept them from disclosing their secret. The admiral suggested that the entire security check required for entry into the "On-the-Roof Gang" could have consisted of a simple question: "Can you keep a secret?"

The admiral knew, however, that the integrity of these men had withstood the test of half a century; they really could keep a secret. Admiral Hays' remark struck

home for many of the wives and widows of the OTRG members, for it was only recently that most of them were permitted to learn the secret their husbands had harbored for so long.

"I knew my husband's job was important, but I never knew just what it had been until 1981—after we'd been married for 38 years!" exclaimed Quinn's wife, Rachael. "And yet," she continued, "being a Navy wife has been a very, very prideful thing. I wouldn't have traded it for anything."

That pride runs in the Quinn family. Their son, Charles G. Quinn Jr., is a chief radioman aboard USS *Carl Vinson* (CVN 70).

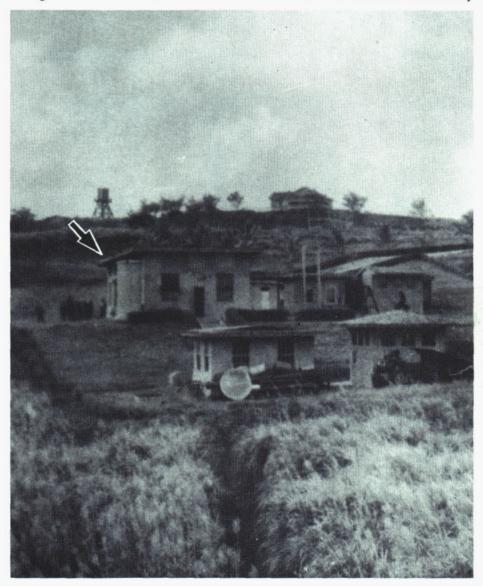
The proud wives of the gang learned the big secret at a convention of the Naval

Cryptologic Veterans Association in Pensacola, Fla., in 1981.

"Even at the convention we didn't learn about everything our husbands did," Mrs. Quinn said. "For security reasons, we just don't need to know. But knowing how important their job was makes our fondness for the Navy ever more special."

The secrets and hardships shared by members of the gang before and during World War II made for friendships that continue today. Captain Harold E. Joslin, who was one of the seven OTRG members captured on Guam and imprisoned by the Japanese, came to appreciate the value of a good friend while a prisoner of war.

"Being a POW gave me an opportunity to sort out my life under difficult circumstances. I found out that there weren't many



Station Libugon on Guam was a key listening post for "roofers" until Dec. 7, 1941. All eight operators assigned there became prisoners of war for 45 months, but their Japanese captors never learned of their secret mission. Photo courtesy Rear Adm. Joseph N. Wenger.



things in life that were very important after my family, my country and my belief," Joslin said. "I learned the meaning of a good friend. There wasn't much else."

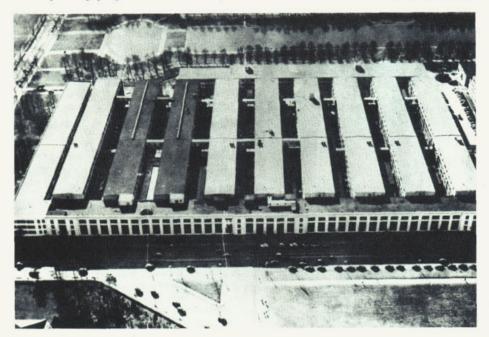
The "On-the-Roof Gang" became a "family," enjoying camaraderie compa-

rable to that of a ship's crew. Today, many of those friendships live on; it's because of one of those friendships that the OTRG exists.

"Several of us retired OTRG members and our wives had been playing weekly bridge games for years and talking about getting together a list of the gang," recalled Lieutenant Commander Pearly L. Phillips. "Then, I decided that we'd better stop talking about it and do something!" That was in the late 1960s.

By 1971, after enlisting the aid and wracking the brains of almost 50 OTRG members, Phillips published a roster of "on-the-roof"-trained special radio operators. A reunion was held the following year, where many more old friendships were rekindled and addresses exchanged.

On the 40th anniversary of the attack on Pearl Harbor, in December 1981, a second reunion was held in Washington. Twenty-one "roofers" attended that gettogether. It was then that the idea for a



A gathering of the "old-timers" at the recent dedication (above-photo by Raymond J. Humenik) and the Main Navy Department Building at Constitution Ave. & 17th St., N.W., Washington, D.C., (below-photo courtesy of Rear Adm. Joseph N. Wenger) where the first cryptologic training school, a steel-reinforced, concrete blockhouse, was located on the roof of the sixth wing from 1928 to 1941

'On the Roof Gang'

memorial and an award to today's outstanding cryptologists surfaced.

"We wanted to leave some footprints in the sands of time," said Chief Warrant Officer Norman V. Lewis, who retired from the Navy in 1947. "Admiral Pat March dedicated several buildings at the Naval Technical Training Center in Pensacola to some of our earliest and most accomplished cryptologists in 1976. That was the beginning of recognition of those of us who lived with these secrets for so long," he said, recalling the dedication of five buildings at the cryptologic training command to deceased members by then-Naval Security Group Commander Rear Admiral G.P. March.

The buildings are named for Rear Admiral Joseph Rice Dennis, Lieutenant Commander Charles E. Daniels, Lieutenant Max Gunn, Chief Radioman Walter McGregor and Chief Radioman Harry "Pappy" Kidder. Kidder is the best-known on-the-roof instructor, having trained himself in the Japanese code before leading six of the 25 classes held on the roof.

After the 1981 reunion, Phillips and Joslin approached Admiral Dillingham and the Naval Security Group, looking for a "home" for the "On-the-Roof Gang." After 15 years of diligence, Phillips' files

on the OTRG nearly filled the basement of his home in Maryland.

Noting the historical significance of these pioneers of cryptology, Admiral Dillingham readily accepted custody of the OTRG historical files on behalf of the Rear Admiral Joseph N. Wenger Crytologic Museum, which is housed in the security group's Washington headquarters building. The admiral also heartily endorsed the idea of the award and the memorial. In 18 months, both became reality. In establishing the award, Admiral Dillingham challenged today's enlisted cryptologists "to build on the tradition of excellence established by the 'On-the-Roof Gang.' " The awards will be presented each November with the recipients' names inscribed on brass plaques near the OTRG Memorial.

Lt. Pearson unveiled the memorial. Pearson was the senior living member of the OTRG at the dedication; he graduated from the fourth class, in August 1930. The senior living "roofer" is Lieutenant Commander Keith E. Goodwin, who was in the first class held atop Main Navy in 1928.

Pearson, speaking after the dedication, summed up the spirit of the memorial: "As I pulled the curtain aside and unveiled the beautiful bronze memorial, I

realized that now, after so many years of living in secrecy, the gang has a place to call home, at the home of the organization which we helped establish. And when the bugler played taps, and I thought of the 86 of us who have died, I knew that the 'On-the-Roof Gang' would always have a place to muster.''

It's appropriate that the memorial is at the home of the organization the "On-the-Roof Gang" started—the Naval Security Group. Today's security group, however, is just a bit larger than it was when the OTRG laid the cornerstone.

The "gang's" successors belong to an active force of approximately 1,100 Navy and Marine Corps cryptologic-designated officers and 11,000 Navy and Marine Corps enlisted people. That active force is backed up by a cryptologic reserve force of some 500 officers and 2,500 enlisted technicians. In Admiral Hays words, "Our cryptologic personnel have become interwoven as an integral part of our Navy and Marine Corps mission in the defense of our nation."

Joslin recognizes that importance as well and is proud of those who make up the



Left: James W. Pearson unveils the "On-the-Roof Gang" Memorial. Photo by PHAN Ron Wentworth. Above: Rear Adm. Paul W. Dillingham Jr., recent commander of Naval Security Group, signs official instruction establishing "On-the-Roof Gang" annual award. Photo by Raymond J. Humenik.

Naval Security Group today. "I think today's technicians are a fine group of young men and women," Joslin said. "They certainly have a lot more difficult problems to deal with these days, but they have a lot more sophisticated equipment available. Their training is excellent in the security group."

Joslin pointed out the number of different specialties of today's cryptologists, remembering "back when" the OTRG had to be jacks-of-all-trades. Today, "CTs" can specialize in administration (CT "A" branch); repairing and maintaining complex computerized systems (CT "M" maintenance branch); analyzing components of the electromagnetic environment (CT "T" - technical branch); operating satellite communications systems (CT "O" - operations); learning foreign languages (CT "I" interpretive); and, in the tradition of the "On-the-Roof Gang," learning Morse code (CT "R" collection).

Naval cryptologists today serve at 47 shore facilities, providing a variety of technical functions, at sea, in different types of combatant ships and aboard early warning aircraft. At sea, among other duties, they provide direct cryptologic support to on-scene tactical commanders.

Perhaps the biggest challenge facing the thousands of people in the Naval Security Group today is keeping secrets as well as the 176 members of the "On-the-Roof Gang" did. Moreover, maintaining the impressive standards of pride and professionalism established by OTRG will be an on-going challenge among enlisted cryptologists vying for honorary membership in the gang. As long as there's a Naval Security Group, the annual award for excellence in cryptology will inspire young men and women to preserve their proud heritage.

Of all the memories shared by members of the gang at the dedication ceremony and the get-together that followed, memories of Navy friendships and their early days at sea as enlisted radiomen seem to overshadow the rest.

Lieutenant Parr said it best, "There's nothing like getting up early in the morning, with the sea beneath your feet, and going topside for your first cup of Navy coffee. That kind of sunrise is one of the most beautiful things in the world.

"It's a fine feeling, knowing that as long as we've got a Navy—and a Naval Security Group—the seas of the world will be free, and the sunrises all as beautiful. And despite daily advances in technology, it will always be men like the 'On-the-Roof Gang' who risk their lives in the name of freedom."

Left to right: Pearly L. Phillips, Retired Capt. Harold E. Joslin and James W. Pearson. Pearson is the second senior living member of OTRG; he unveiled the memorial on June 17.



Navy Tradition Survives

Story by Ensign Roger B. Thomas Photos by NCI David G. Knepper

One of the few early seafaring skills to survive the advance of time and technology unchanged is that of square knotting, or the making of "MacNamara's Lace."

Recently, men of the first division on board USS *Briscoe* (DD 977) recreated the age-old art of making the hand-tied lace.

The project originated when a ceremonial cover was required for the Commander in Chief, U.S. Atlantic Fleet change of command ceremony on USS *John F. Kennedy* (CV 67).

Chief Boatswain's Mate Emmitt Webster of the Briscoe crew was the project leader. Webster first learned the skill in 1959 aboard the destroyer tender USS

BMC Webster and his assistants display an almost-completed 10-foot section of "Mac-Namara's Lace:" (1-r) BM3 Kenneth Neely, BMSN Terry Ward, BM1 Charles Urquhart, BMC Webster, and BM3 Patrick Hollingsworth.



BM1 Urquhart enjoys his work while Cmdr. Hontz examines the finished product.

Shenandoah (AD 26). Recently he conveyed his skill to four assistants on *Briscoe*.

Square knotting supposedly originated in the Middle East, where it was called macrame, meaning fringe in Arabic. When first practiced, the fringes were coarse. It was popularized in Italy at the time of the Crusades where it became finer in texture and design.

Exactly when sailors adopted the art of square knotting is not known. However, in the middle of the 19th century, crews of both American and British navies were already square knot artisans. Ships were ornately bedecked with knotted tablecloths and covers for binnacles. Skylights, capstans, wheels and bells also displayed the knotted fringe.

Sailors played an important part in spreading the craft throughout the world. The French introduced it to the East Coast Indians of Canada, and the Spanish took it to Mexico. How sailors came to term this art, "MacNamara's Lace" is anyone's guess. It might have been a deriv-



ative of the word macrame or perhaps a seafarer named MacNamara lent his name to the skill.

In any event, the craft was handed down to each new generation of seamen principally by example rather than through written texts.

Webster and his assistants transformed 40 feet of canvas into MacNamara's Lace by careful planning and employing the strictest standards of quality control and patience. The lace was constructed in 10-foot sections, with two men working on each section.

First, the horizontal threads of the canvas had to be unraveled. Then, the remaining threads were combed out and a pattern of half hitches was applied.

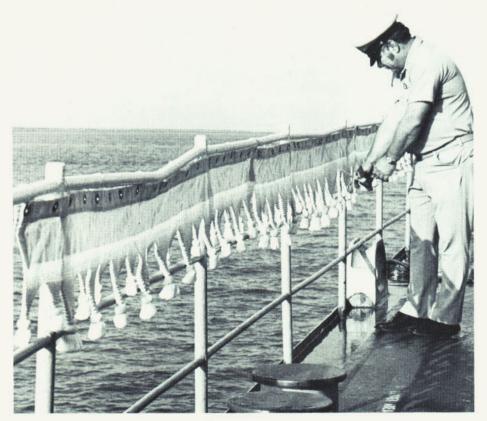
Webster said, "Maintaining a uniform technique among my assistants was the greatest challenge."

According to his calculations, 34,800 half hitches were tied to create the masterpiece. The entire process took 15 days.

"If this art were taught to young boatswain's mates, it would instill more pride and professionalism in the rating," said Webster.

Webster's assistants were First Class Boatswain's Mate Charles Urquhart Jr., Third Class Boatswain's Mates Kenneth Neely and Patrick Hollingsworth, and Seaman Boatswain's Mate Striker Terry Ward.

They were all awarded a "well done" by their commanding officer, Commander Edward B. Hontz, for their devotion to learning and applying the ancient skill, while preserving a proud Navy tradition.



BMC Webster admires a job well done and puts the finishing touches on the freshly washed and bleached MacNamara's Lace.

NavOrdSta Louisville

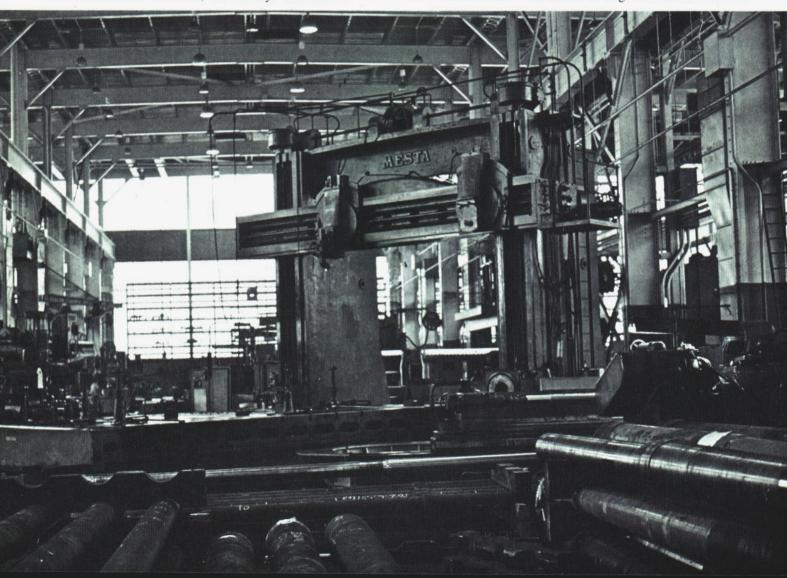
Gunsmiths of the Navy

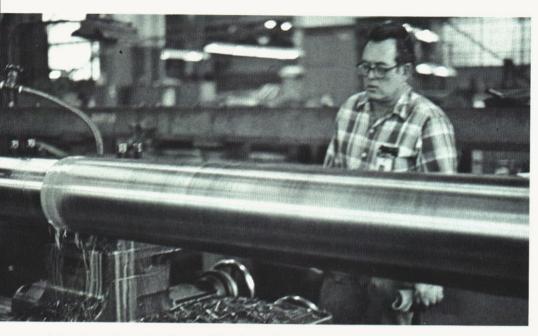
In 1939, a dark power menaced Europe. Germany, with Hitler in power, swept unopposed across Austria and Czechoslovakia. Using "blitzkrieg" or lightning war, the Germans attacked Poland on Sept. 1. Before the month was over, the country

had fallen. In response, the Allies lined up for battle.

Because of the mounting conflict and the need to supply Britain with arms, the United States expanded its production of ordnance and munitions. Five new ordnance plants were established in the United

One of the five was in Louisville, Ky., a site that had readily available rail transportation to either coast, ample manpower and access to large amounts of raw ma-





To overhaul the fleet's guns, NOS Louisville uses massive equipment (opposite page) and small one-man lathes (left and below left). When barrels are finished, they are mounted on guns (below right) and dry-fired. Toni Graves (below) started in an office job but later became a journeyman machinist. Photo by Rudolph Spencer.

terials. Ground was broken by Westinghouse, and only six months after the machinery first stirred to life, Louisville shipped out its first ordnance.

For five long years, railroad cars loaded with gun mounts and barrels, projectiles and torpedo tubes clattered away from the station. Finally, Germany, then Japan, surrendered and a welcome peace returned to the world.

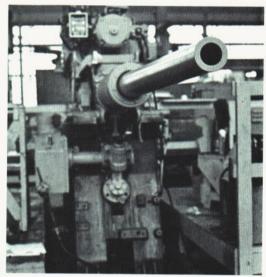
For the next few years, the ordnance station in Louisville slumbered. Of the 2,000 workers who once occupied the two dozen major buildings, only 100 remained. In 1946, the Navy took over administration of the plant and officially renamed it Naval Ordnance Plant Louisville. It became the Naval Ordnance Station on Feb. 14, 1966.

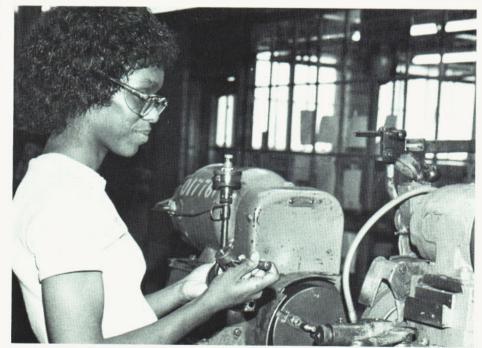
The quiet at the station was not to last long. In June 1950, communist North Korea attacked South Korea bringing about a conflict which was to last three years. Once again, NavOrdSta Louisville stirred to life. Since then, the station has continually overhauled and modernized the Navy's 3-inch and 5-inch guns, and its missile launchers, torpedo tubes and fire control systems. It has manufactured missile motor chambers, warhead cases and 40mm machine guns, and renewed essential submarine parts.

Today, according to the commanding officer, Captain T.C. Warren, "Nav-OrdSta Louisville is known as the 'Gunsmiths of the Navy.' Our object is to provide the fleet with overhauled guns and launchers that are as good as new."

NavOrdSta Louisville is the sixth larg-







NavOrdSta Louisville

est industrial operation in the metropolitan Louisville area employing more than 2,500 civilian workers. Navy officers hold only six jobs at the station.

"After about 10 years, Navy guns have deteriorated," said Warren. "We take them down to the last nut and bolt—a typical 5-inch gun has nearly 18,000 parts—and completely rebuild them. And we can do this for about one-tenth the cost of purchasing a new gun.

"We talk a lot about guns," he added, "but we also do a great deal of fire-control equipment overhauls on directors, radars, range finders, telescopes, computers—the whole product line."

To do its job, NavOrdSta Louisville employs skilled people and lots of them. The station is one of the largest employers of engineers in Kentucky and the largest employer of machinists, heat treaters, welders, metal fabricators, electricians and electroplaters. The station also employs

optical technicians, toolmakers, insulation specialists, crane operators, painters, pipe and plastic workers and sandblasters. Many women work at NavOrdSta Louisville in non-traditional roles such as machine tool operator, oiler, trades helper,



and metal-sawing machine operator.

Located on 130 green acres just six miles from downtown, the station's buildings house administration, engineering, assembly and the testing of guns and missile launchers. They also house heavy and light machining, anti-submarine warfare weapon overhaul, fabrication of weapon parts, missile component manufacture, electroplating and general laboratory work.

Because the work at NavOrdSta Louisville involves overhaul and modernization, blueprints for every Navy gun system—past and present—are maintained in the technical documents department. Among the millions of drawings—on microfiche and in hundreds of wide drawers containing originals—one can still find musty blueprints of naval ordnance dating from the 1800s.

At that time, draftsmen executed their



Gleaming pallets of machined submarine ball valves (top) lie ready to be reassembled and shipped back to the fleet. Working under hot lights, fiberglass technicians (above and right) make repairs to gun housings. Overhaul work at NOS Louisville even includes radar fire control units (far right).



drawings on thick vellum sheets and labeled their work in a florid script that complemented their almost photographically accurate style. It is common to open a drawer and view the past through drawings of *Monitor*-class vessels, torpedoes propelled by steam engines, Gatling guns and even our nation's first torpedo boats.

Blueprints of the battleship USS *New Jersey* (BB 62) are also necessary for the engineers at the station today who are responsible for all of the ship's weapon systems including the powerful 16-inch guns. So thorough are their records that they can tell exactly how many rounds have been fired through each massive barrel.

NavOrdSta Louisville is the major overhaul point for Navy guns and missile launchers in the United States. The station provides technical and logistic support for all present weapon systems and for new systems being acquired for the fleet.

One of these systems is *Phalanx*. The station has been appointed the overhaul facility for the close-in weapon system. This system can destroy incoming targets traveling even at supersonic speeds by firing radar-directed, 20mm depleted-uranium projectiles at rates up to 3,000 rounds per minute. There are more than 70 *Phalanx* systems now in use and the installation schedule is rapidly increasing.

Aside from its work with the *Phalanx* system, NavOrdSta Louisville, a year ago, introduced to the fleet a significant but little marked milestone in naval ordnance—the digital MK 68 Gun Fire Control System. "For the first time," said Warren, "our engineers gave us a system that is more accurate than the gun system itself."

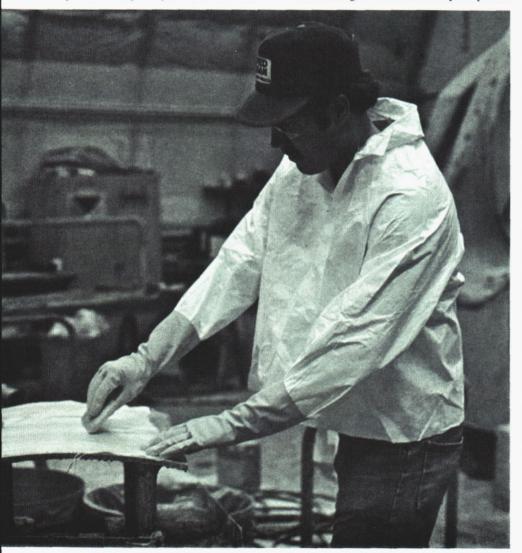
According to Warren, heavy emphasis

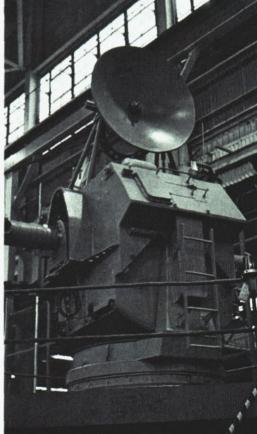
is put on meeting schedules. "A combatant in the shipyard isn't much use to the Navy."

But what happens when the problem is too tough to be handled by a ship's technician? Warren's answer is, "We send field engineers and technicians to the ships. We act as the last resort for the fleet. All our people are professionals."

The history of NavOrdSta Louisville is not yet finished. The station has continued to design new weapons such as an 8-inch howitzer for the Marine Corps and a 40mm machine gun. As the Navy's last remaining major overhaul site for naval ordnance, the station's civilian employees stand ready to meet any challenge to our nation's defense and carry on the four decades of tradition as the "Gunsmiths of the Navy."

-By JO1 Dale Hewey





USS Belleau Wood

Up With People

Story by JO2 Jeff Embry, USS Belleau Wood
Photos by PH2 Tony Huntsburger,
PH3 Francis Anglada and PHAN Dale Zukowski

NO SHORING ELECTION OF THE PROPERTY OF THE PRO

"Celebrate good times, come on" echoed off the bulkheads of USS *Belleau Wood*'s (LHA 3) hangar deck as sailors clapped in time to the music.

The good times were generated by "Up With People," the internationally acclaimed group of young entertainers from around the world. "Up With People" was in San Diego for a concert tour, and Belleau Wood hosted their premiere performance in the Southern California city.

Belleau Wood crew members filled the hangar deck and voiced their approval of the concert. Some even danced with the performers during a production number.

The "Up With People" troupe arrived early in the morning to set up and tour the ship, which recently returned from a deployment to the Western Pacific and Indian oceans. Following an informal meeting with Rear Admiral William A. Walsh, Commander Amphibious Group Eastern Pacific, the cast presented its show. After the show, performers dined with *Belleau Wood* crew members.

They then departed to continue their tour, leaving *Belleau Wood* crew members with memories of "good times" with "Up With People."









Opposite page: Cast members perform dances from various countries. Top left: An energetic cast member entertains Belleau Wood crew members after the show. Left: A crew member acts as host and answers questions about the ship. Above: A Belleau Wood crew member joins in the performance.

Mail Buoy

Moon Walk

SIR: In "The Navy Remembers," July issue, you state that Neil Armstrong stepped onto the surface of the moon at 4 p.m., EDT, July 20, 1969. Having followed the space program since *Apollo VII* when I was 12, I couldn't help but chuckle at that because, if Mr. Armstrong had indeed stepped onto the moon at 4 p.m., that last step would have been a lulu—close to 69 miles. This is because the Lunar Module *Eagle* did not land on the surface of the moon until 4:20 p.m., EDT. In fact, the "one small step for man, one giant leap for mankind" happened at 10:50:20 p.m., EDT.—Lt.j.g. Michael Liebmann.

• You got us. Fact is, a couple of other readers caught the error concerning Armstrong's moonwalk. We can always plead that we were worlds apart on this one.—ED.

36th Parallel

SIR: Regarding the "Crossing the Line" letter in the June 1983 issue, "A Sailor's Treasury" by Frank Shay (now out of print) sheds some light on the ceremony.—Mabel B. McCullough, NAS Pensacola, Fla.

• Shay, under the heading Crossing the Line, states that the ceremony had its beginnings with the early Dutch, but the line in those days was the 36th parallel off the Straits of Gibraltar. In those days, that was considered a long way from home. He states that skylarking or fun and games was a means to relieve the tedium of passing through the doldrums. The idea, even then, was to initiate "all lubbers" who had not yet crossed the line.

According to the author, "The court consisted of Triton, with his horn, as master of ceremonies, King Neptune and Queen Amphitrite (usually Hampertight), Davy Jones, complete with horns, humped back, and a tail, usually carrying a trident of wood."

Shay states that Davy was the court jester; other characters were added—such as a sea lawyer—who was supposed to defend the victim but always ended up getting him into more trouble.

The ceremony has changed little over the centuries. The Dutch employed the plank, the tank of sea water, interrogation and—of course—swabbing one's face with horrible mixtures before being shaved with a wooden razor. Finally the seaman was entered "on the royal rolls."—ED.

Big Bridge

SIR: I believe that the photo on page 37, lower left, June 1983 issue, has the Oakland/San Francisco Bay Bridge misidentified as the Golden Gate Bridge.—EWC Paul Mullendore.

• You're right. That is the Bay Bridge in the background, not the Golden Gate Bridge. This is one of those cases where we said more than we had to in the cutline; the bridge, after all, had nothing to do with the information we were trying to convey.—ED.

Reunions

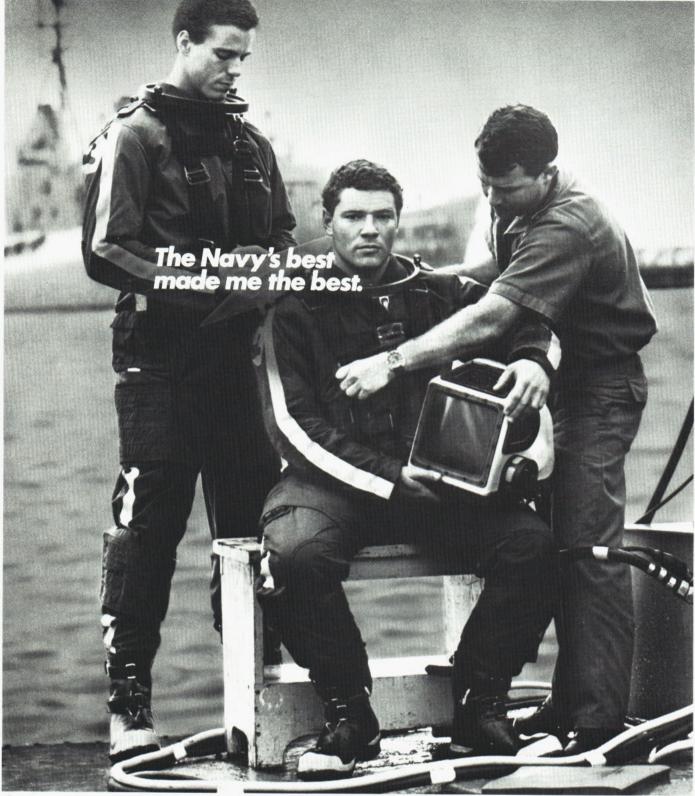
- U.S. Navy Armed Guard World War II Veterans—Reunion Oct. 14-15, 1983, Wilmington, N.C. Contact C.A. Lloyd, 5712 Partridge Lane, Raleigh, N.C. 27609; telephone (919) 872-7115.
- Patrol Bombing Squadron 26—Eighth reunion Oct. 14-16, 1983, Long Beach, Calif. Contact D.W. Colburn, 26804 Basswood Ave., Palos Verdes, Calif. 90274.
- Second Armed Guard—Reunion Oct. 14-16, 1983, Wilmington, N.C., for gunners and officers who served aboard merchant ships during World War II. Contact Leonard W. Carlson, 5894 N. St. Albans, Shoreview, Minn. 55112.
- Mine Division 54—Reunion Oct. 14-16, 1983, San Diego. Contact Charlie Geier, 1621 S. Faywood, Anaheim, Calif. 92804; telephone (714) 535-4380.
- USS Ellyson (DD 454), 1941-1945
 —Reunion Oct. 21-22, 1983, Philadelphia.
 Contact James R. Galbreth, 8927 Carriage
 Lane, Indianapolis, Ind. 46256; telephone
 (317) 849-3315.
- USS Hurst (DE 250)—Reunion Oct.
 15-16, 1983, Atlantic City, N.J. Contact Charles Laird, 6 Breslin Ave., Haddonfield, N.J. 08033; telephone (609) 429-3783.
- Syracuse Photojournalism Program (NEC 8148)—Twenty-year reunion and seminar, Oct. 21-22, 1983, Syracuse University, Syracuse, N.Y. Contact Professor Fred Demarest; telephone (315) 423-2304.
- "Little Beavers Squadron" Destroyer Squadron 23—Joint reunion Oct. 27-30, 1983, Washington, D.C., for all who served in the squadron during World War II. Contact C.D. Lail, 159 9th St., Colonial Beach,

Va. 22443; telephone (804) 224-7643.

- USS Aulick (DD 569) and USS Braine (DD 630)—Crew members from 1944-45 are invited to "Little Beaver Squadron" reunion Oct. 27-30, 1983, in Washington, D.C. Contact C.D. Lail, 159 9th St., Colonial Beach, Va. 22443; telephone (804)
- Navy MATS VRs (VR 3, 6, 7, 8, 22 and NATWING PAC)—Reunion Nov. 3-5, 1983, Reno, Nev. Contact Monte "Red" Umphress, 1348 Hanchett Ave., San Jose, Calif. 95126; telephone (408) 295-0218.
- USS Mars (AFS 1)—Reunion Dec. 9-11, 1983, San Diego for crew members who served aboard from 1963 to 1970. Contact Mars Reunion, PO Box 86253, San Diego, Calif. 92138.
- USS Ogden (LPD 5)—Planning a reunion. Contact BMCS Jackson, 1715 Tremaine Way, San Diego, Calif. 92154.
- USS Stembel (DD 644)—Planning a reunion for those who served aboard from 1952 to 1956. Contact K.M. Jones, 6115 Brand Road, Dublin, Ohio 43017; telephone (614) 889-2679.
- North Africa, Port Lyautey, French Morocco, Navy No. 214, 1947-49—Planning a reunion. Contact Larry Ingram, PO Box 9483, Fort Worth, Texas 76107.
- USS Rockwall (APA 230)—Planning a reunion. Contact Donald J. Kusnir, 2140 S. Military Trail, West Palm Beach, Fla. 33406
- USS LST 134—Former crew members interested in a reunion, contact Nick Leonoudakis, 310 Ferndale Ave., South San Francisco, Calif. 94080.
- USS Dunlap (DD 384)—Crew members interested in a reunion, contact Robert Wallick, 100 S. Main St., Park Rapids, Minn. 56470; telephone (218) 732-5122.
- USS Hancock (CV/CVA 19)—Crew members interested in a reunion, contact Charles F. Boyst, 1801 W. Bend Court, Clemmons, N.C. 27012.
- USS Shangrai-La (CV 38) from 1944-1971—Crew members interested in a reunion, contact Bob Ketenheim, 26 Magnolia Circle, Shrewsburg, Pa. 19361; telephone (717) 235-7847.
- USS Louisville (CA 28)—Seeking former U.S. Navy and Marine crew members who served from 1931 to 1946. Contact Frank Clemens, 6 Stirrup Lane, Chester Springs, Pa. 19425.

All Hands, the magazine of the U.S. Navy, is published for the information and interest of all members of the naval service. Opinions expressed are not necessarily those of the Department of the Navy. Reference to regulations, orders and directives is for information only and does not by publication herein constitute authority for action. All material not copyrighted may be reprinted.

DISTRIBUTION: All Hands is distributed to all Navy activities on the Standard Navy Distribution List on the basis of one copy for approximately six naval officers and enlisted personnel on active duty. Limited distribution to Marine Corps activities. PERSONAL COPIES: All Hands is for sale by Superintendent of Documents, U.S. Government Printing Office, Wash., D.C. 20402.



Getting to the top of your profession isn't always a matter of giving your best. Others have to give you their best, too. Their best instruction. Best know-how. And experience.

It is a fact that Navy divers, pilots, engineers and nuclear propulsion operators can compete with anybody in their fields anywhere.

The greatest resource in the Navy will always be its people. The expertise

they share. And the knowledge they pass on.

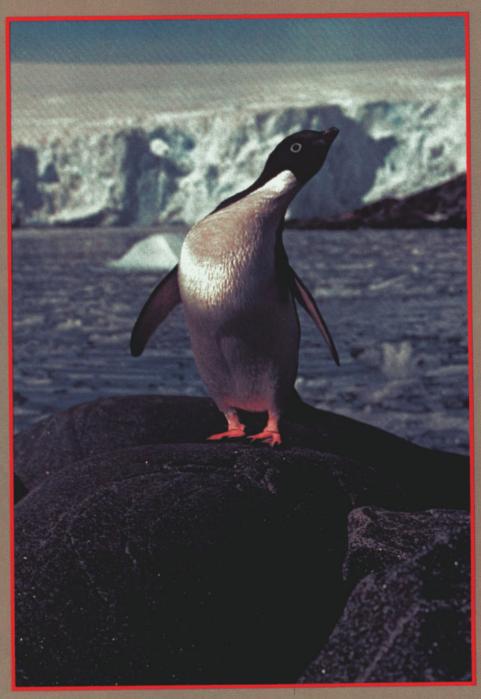
If you're up for another enlistment, consider how many more opportunities for training and experience await you.

In the Navy.

See your career counselor.

Because as the Navy moves ahead, you can move with it.

MOVE UP, NOT OUT. STAY NAVY. SEE YOUR CAREER COUNSELOR.



Polar Star's Journey • See page 28